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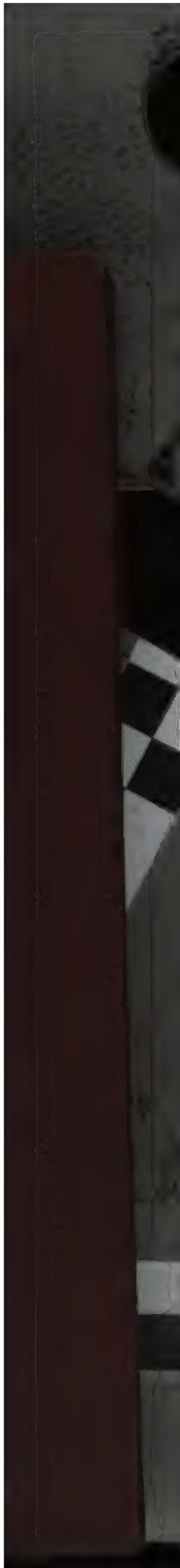
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Cleveland

Industrial Medical Service

Women and Industry Children and Industry

PART SEVEN

**Cleveland Hospital and
Health Survey**



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Preface

The Hospital and Health Survey of Cleveland was made at the request of the Cleveland Hospital Council.

The Survey Committee appointed to be directly responsible for the work and through whose hands this report has been received for publication consisted of the following:

MALCOLM L. McBRIDE, *Chairman*;

MRS. ALFRED A. BREWSTER,

THOMAS COUGHLIN,

RICHARD F. GRANT,

SAMUEL H. HALLE,

OTTO MILLER,

DR. H. L. ROCKWOOD,

HOWELL WRIGHT, *Secretary*

The staff responsible for the work were:

HAVEN EMERSON, M. D., *Director*,

and the following collaborators:

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JOSEPHINE GOLDMARK, B. A., *Director of the Nursing Survey*;

WADE WRIGHT, M. D., *Director of the Industrial Hygiene Survey*;

DONALD B. ARMSTRONG, M. D., *Director of Tuberculosis Survey*;

S. JOSEPHINE BAKER, M. D., D. P. H., *Director of the Infant and Maternity Survey*;

T. W. SALMON, M. D., *Director of the Mental Hygiene Survey*;

W. F. SNOW, M. D., *Director of the Venereal Disease Survey*;

LOUIS I. DUBLIN, Ph. D., *Director of the Vital Statistics Survey*.

The expenses of the Survey and of the publication of the report have been met by appropriations received from the Community Chest, through the Welfare Federation, of which the Hospital Council is a member.

The report as a whole, or by sections, can be obtained from the Cleveland Hospital Council. A list of the parts will be found in the back of this volume, together with prices.

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REPORT OF THE INDUSTRIAL DIVISION

PREFACE

In an industrial city such as Cleveland it is not possible to make a comprehensive study of the health of the community without consideration of the relations of health and industry. Certain of these relations are the matter of this report.

The Industrial Division of the Hospital and Health Survey has been concerned with three fields of industrial activity: medical, surgical and nursing service in industry; the employment of women and the employment of children. These three subjects are discussed separately.

All recommendations and for the most part the discussion of various topics relate specifically to conditions as observed in Cleveland, though it is true that many other industrial cities present similar problems.

The Survey is indebted to the Committee for the Study of Public Health Nursing Education for designating Mrs. Anna M. Staebler to aid in the study of industrial nursing and to the Consumers' League of Ohio which contributed the services of Miss Florence V. Ball who has conducted the study of children and industry.

The Survey wishes also to acknowledge its appreciation of the cooperation and assistance offered by the industrial organizations of Cleveland and by numerous individuals and agencies in the city and state which have freely aided in these studies.

Health and Industry

Industrial Medical Service

By WADE WRIGHT, M. D.

INTRODUCTION

IN undertaking to study existing measures for the safeguarding of the health of industrial workers it was fully realized that detailed consideration of working conditions, of sanitation, of accident hazards and of industrial health, was not possible in the course of a brief survey. It has been the purpose of those conducting this inquiry to obtain certain essential data regarding the medical organization which various industrial and mercantile establishments have developed for the care of the health of their employes, to estimate as accurately as might be, the probable efficacy of such organization and to present in this report the findings of such an inquiry together with an expression of opinion regarding the merits of certain features observed, and ways and means for the remedying of the more outstanding defects.

It is to be remembered that the Survey was without legal authority to enter and inspect industrial or other establishments and that this study has been made possible only through the courtesy and cooperation of the employers of the city.

The information here presented was obtained by questionnaire, by visit and by conference. It was not practicable to visit all of the large industrial establishments, but the great majority of plants employing over five hundred persons in which medical service is rendered, were visited by one of the four members of the staff of the Industrial Division.

In all, about one hundred organizations of various sizes were carefully studied and information secured in some detail regarding many more.

For the purpose of this report certain observations relating to industry will be separated from those concerning mercantile establishments, the construction trades and the public utilities.

THE INDUSTRIES OF CLEVELAND

The statistical studies of the number and size of industrial plants were based upon the "Directory of Ohio Manufacturers" issued by the Industrial Commission of Ohio in 1918. The information there published has been corrected by data more recently obtained, and though the resulting figures are not accurate they are probably a fair approximation of the facts.

In Table I., published in the appendix, is shown the division of 1,521 industrial organizations into several size-groups, together with the group-total number of employes, the average number of employes per establishment and the percentages of establishments and employes in each group.

Approximately 74 per cent of the city's industrial workers are engaged in establishments employing 200 or more, organizations of this size constituting

only 12 per cent of the total number of industrial organizations. 57 per cent of the employees are engaged in establishments employing 500 or more, 5.3 per cent of the organizations; and 43 per cent of the employees work in establishments employing 1,000 or more, 2.6 per cent of all organizations.

It is evident, with so great a portion of all industrial operatives employed in a relatively small number of large establishments, that medical service would reach a very considerable number of workers if it were rendered in the larger plants.

MEDICAL SERVICE IN INDUSTRY

Table II. presents the findings relating to medical service in industrial establishments of various sizes. It was perhaps inevitable that in certain instances the information obtained from organizations was inexact. This was true of some statements regarding the place of the medical department in the scheme of administration and its relation to the rest of the industrial organism and regarding the status of physicians employed part time and on call. It has been necessary in consequence that the staff rather freely interpret some of these statements.

In estimating the number of firms furnishing medical service a rough standard of adequacy has been accepted. The presence in a plant of a first-aid cabinet which might be supplemented in the event of a serious emergency by the attention of a neighborhood physician has not been reckoned as "medical service." Those plants employing trained nurses for dispensary work have been rated as furnishing medical service even though physicians were seldom called in.

The quality of medical service rendered in the establishments which have been considered as furnishing service undoubtedly ranges between widely separated extremes. In comparatively few instances has it been found to be of a high order, judged by the best standards of industrial medicine and surgery as practiced in this country.

It is noteworthy and most creditable, however, that about one-half of the industrial workers of the city are upon occasion receiving some sort of medical attention in industrial plants.

The dressing of industrial injuries of course demands immediate attention and it is true and to be expected that there is a concentration of personnel and service to meet this first need. A relatively small amount of time and service is devoted to other than surgical work. No effort has been made by the Survey to appraise the quality of surgical work done by industrial surgeons in the city, but there is much evidence that Cleveland is fortunate in having a group of interested, conscientious and able surgeons giving their time especially to industrial cases.

INDUSTRIAL PHYSICIANS

In Table III. are tabulated data concerning the medical department personnel of establishments rendering medical service.

Start with high wage

The Survey has knowledge of but seven physicians employed upon a full-time basis in the industries of Cleveland. There is a much larger group, numbering over twenty, who are identified almost exclusively with industrial practice, including a number of surgeons who are each engaged on a part-time or visit basis by several firms.

There has been an interesting and important development of medical partnerships which purpose to render comprehensive service to their clients, including dispensary administration and health supervision as well as industrial medicine and surgery. There is much to be hoped of this type of organization, especially in connection with small establishments, with contracting and construction work and those firms not in a position to command the full service of an industrial physician as the administrative officer of a medical department.

Industrial medical service as at present conceived is comparatively new, crudely developed and far from being standardized. Industries have drawn into their medical departments a variety of types of physicians.

In Cleveland there are a few highly skilled industrial physicians, trained to consider the intricate inter-relations of medicine and industry, possessed of wide technical knowledge of their special field.

There is another group of physicians doing little but casualty surgery, some of them eminently capable and many of them less so. As a rule these men are frankly interested in nothing but surgical conditions, but many will consent nevertheless to submit opinions upon any matters relating to health and sanitation, including obscure poisonings or involved questions of industrial hygiene.

A third class includes men who have been drawn into industry from general practice, not infrequently in a sense, against their desire. Often the basis of selection of such physicians was curious. They were in many instances the attending family physician of plant executives. They are applying in industry methods very similar to those which they formerly employed in private practice, with probably the same degree of conscientiousness and scientific honesty which characterized their work previously. Many of them become capable executives and well qualified industrial physicians. They are, however, strikingly indicative of the lack of comprehension among those directing industrial establishments of the importance of selecting for plant physicians, men technically equipped to render a technical service and who are possessed of proper personality and ability to develop with and beyond assigned tasks.

Another group, happily diminishing, is made up of incapables, men who have not succeeded in general practice, who have drifted near financial rocks and who eagerly welcome even the small salaries or fees which they may secure in establishments administered by those who still are of the impression that any doctor is a good doctor, and if secured cheaply, a better one for their purposes.

There was a time, not long ago, when industry diligently sought for the struggling young physician and, finding him, offered him employment.

Usually the salary was very small, but the collateral inducements glowing. The young man was informed that despite the low salary he would be able to secure a splendid income by the simple means of developing a private practice among the company's employes.

The glowing prophecy has been fulfilled and the physician, perhaps no longer young and struggling, has a splendid income, practising among the employes.

The public views with alarm and suspicion and reads editorials about public officials who personally benefit through their positions, but industry has sought and welcomed the physician who comes to advise and remains to operate. Industry does not aim to employ superintendents or treasurers upon such a basis of remuneration, why physicians?

Cleveland is not without numerous industrial physicians whose incomes are very appreciably augmented from the personal practice worked up in industrial dispensaries. The cough which takes a laborer to his plant dispensary may carry him rather unexpectedly still farther to the company doctor's down-town office and a tonsillectomy operation, and beyond that into a dazed state of financial stringency. Or by a particularly fortuitous arrangement, one involving many thousands of operatives in Cleveland, the company physician or surgeon may collect within the company dispensary his personal fee for professional services rendered.

It is not dishonest or unethical practice, any more than is that of the concessionaire who sells pie by the plant gate, and there are honorable and able men engaged in it. But it is of questionable value to any employer with whom the health of his employes is a matter of real concern. Industrial physicians should be employed to render specific services. If it is the feeling of the management of an industrial establishment that they do not wish to undertake the care of disabilities other than those arising out of industrial injuries, the services of physicians in their employ should be restricted to such cases. Under no circumstances should physicians be permitted to recruit private patients under the guise of their official positions as company servants. Such employes as need care beyond that furnished by the company should be referred to competent practitioners not on the company's medical staff. The situation of an industrial physician in an industrial dispensary is quite analogous to that of a physician on the visiting staff of one of the many reputable hospitals which forbid staff physicians to receive dispensary or hospital cases as private patients except under very special circumstances.

The temptation to enlarge a personal practice in this manner is complicated by other obvious evils, such as unnecessary treatment or operations, intrusions upon the practices of fellow physicians and inevitable exploitation of workers.

The Survey recommends that industrial physicians be selected with regard for their professional and executive abilities and that only the well qualified be chosen; that they be remunerated upon a basis commensurate with the amount and character of services expected of them; that they be not permitted to combine with their official duties personal practice among the company personnel.

INDUSTRIAL NURSING

Industrial nursing is perhaps less standardized than industrial medicine, for the duties assigned to plant nurses vary with plant physicians, types of industries and of employes and the purposes and fancies of plant executives. Of these several factors the last is probably the most potent. Rarely is a capable nurse selected and encouraged to develop and extend her field of usefulness. She is frequently added to the payroll in much the same spirit with which such employes as doorkeepers or telephone operators are added.

The great majority of industrial nurses in Cleveland are registered trained nurses. Most of them have entered industry after a period of private duty nursing, others directly from hospital training schools. It is of course to be expected, as in the case of physicians, that the degree of excellence of training varies. Again, as with physicians, some are well qualified to do industrial work and are intensely interested in the progress of the new profession; some have sought the short hours and freedom of the industrial world, rather than the strain and uncertainty of private duty nursing; and others among the least capable of the nursing profession have drifted in.

A small portion of industrial nurses in the city are not registered nurses and are not graduates of hospital training schools. A number have had short courses in first-aid, others gained their knowledge of emergency surgery as dressing assistants. Some of them are very able and others obviously masquerading in nurses' uniforms and are probably more of a liability than an asset to the firms employing them. One may safely venture the assertion that in certain instances executives employing untrained nurses are not aware of their real professional status.

There is undoubtedly a place in industrial medical service for practical nurses or nurses' assistants, serving with and under the direction of competent medical or nursing authority. At present practical nurses are found in almost every instance in charge of their own departments.

In establishments where there is no organized medical service certain duties ordinarily assigned to a nurse are assumed by matrons or by members of the clerical forces. Such an arrangement is warranted only in a small organization.

The progress of industrial hygiene has been due in large measure to the contributions of industrial nurses. The truth of this may be readily evidenced if one endeavors to withdraw from the fabric of industrial organizations the threads representative of the services, the influence and the personalities of able industrial nurses. It is the industrial nurse in many instances

who stands in the minds of employes as the most kindly, most wholesome human element in a big industrial machine. Her achievement, however, must depend in great degree upon the intelligent support and guidance of the plant administration.

It is to be expected that the personality, abilities and ambitions of industrial nurses should in general be in keeping with the types of industrial organizations which employ them and the purposes for which they are employed. It is as idle to criticize many an industrial nurse for failure to realize fully her opportunities for constructive health work as it is to condemn the surviving old type contract surgeon who is competent simply to bask on the sunny side of the payroll as "a doctor," quite as content as his employers are to have him there.

Not infrequently the nurse gives far more service than is expected of her, little though that service may be. She finds slight stimulus to better effort. If she writes a poor report, it serves as well as a good one, for it doubtless receives but a casual glance from an uninterested front office executive. Perhaps, as in one plant, she finds no official who considers it his duty to review that report, so she submits none. She may attempt to extend her usefulness, as in another Cleveland establishment, but the employes make such increased use of her department that she is retired to her own reservation, instructed to remain there. If the professional advice she offers is unsound, there is no one the wiser, certainly not the recipient of the advice.

If she has had fairly good training, is reasonably decorative, has a ready suggestion for the relief of the general manager's indigestion and the employes like her, she may be an eminent success as an industrial nurse in almost any one of the large group of plants where physicians are employed part time or on call.

The employment of nurses with little or no medical supervision has led in Cleveland to a lowering of accepted standards of nursing and medical practice regarding medication. With the exception of instances so rare as to be practicably negligible the industrial nurses of the city are freely administering drugs for the relief of minor ailments without individual or standing orders of physicians. There is constant and free use made of various sedatives for the relief of headaches, coughs and divers pains and of cocaine for the removal of foreign bodies in the eye. Though it is not to be questioned that many or most nurses are qualified to use these drugs with discretion, the fact remains that indiscriminate medication of this kind is not in accordance with modern standards of medical treatment and unauthorized, as in these instances, it is in direct violation of the medical practice act of the state.

Isolated, as most industrial nurses are, from professional associations, confined to their duties for the entire weekly working period, they naturally tend to become somewhat limited in conception of their duties and their opportunities. They are pioneers in their respective establishments often,

each one endeavoring to work out her own problems, a difficult task when no precedents are at hand and no competent advice readily available.

There is urgent necessity in Cleveland, as in other cities, for some means of carrying to industrial nurses the counsel and technical assistance which most need and many desire. The present Industrial Nurses' Club is presumably of real value in this connection but its services are quite inadequate. It would be much to the advantage of organizations employing industrial nurses to contribute to a common fund devoted to the maintenance of a center for gatherings of industrial nurses; of a good library on industrial hygiene, including related periodicals; of a series of conferences and of one or more well salaried counseling industrial nurses. Such a counsellor, wisely chosen, rendering an expert technical consultation service, could be of unquestioned assistance to industrial nurses and plant executives and would in no sense conflict with established relations of authority and responsibility.

VISITING NURSING

It has been difficult to determine with any exactness the number of firms whose nurses make visits to the homes of employes. In a small number of establishments visiting nursing is an accepted part of the medical department routine, in others, visits to the homes of sick workers are made infrequently. A total of 22 firms are recorded as providing at least occasional visiting nursing services; 13 of these firms employing 1,000 or more; 7 firms employing 500 to 1,000, and 2 firms from 200 to 500 employes. In no instance does a visiting industrial nurse do bedside nursing, at its best the purpose of her visit being rather to determine whether or not the sick or injured worker is receiving proper care.

Industry has made occasional use of nurses furnished by the Visiting Nursing Association. A more extended utilization of such an established service might be advantageous.

In Cleveland a considerable number of nurses employed in industry for visiting do not report to the medical department but are responsible to employment officials. Their task is to visit the homes of absentees to determine the cause of absence and to exert such influence as they may to induce the delinquent to return to work.

Such service, valuable though it may be, is not visiting nursing, is not a part of medical care or supervision and the employment of nurses for this work is frequently a transparent subterfuge of employment departments used to mask the real purpose of such visiting. It rarely fails to discredit the organization responsible for the activity and to lower the respect of employes for the plant nurses. With good reason employes resent the coming to their homes unasked of women who wear the uniform of nurses but who in purpose and in fact belong to the company espionage service and not to its health department.

It is obvious that absence follow-up can best be done by visitors who are qualified to discern illness when it exists, but nurses are so few and absenteeism so prevalent that it is of doubtful wisdom to assign nurses to routine absence follow-up instead of to visiting of the known or suspected sick. In any event, visiting nurses should be considered as medical department personnel and their reports should be part of the medical department records.

RECOMMENDATIONS

The survey recommends that:

Industrial nurses be graduate, registered nurses. That they be employed in the practice of nursing or in the maintenance of the physical welfare of establishment personnel.

That industrial nurses be carefully chosen for professional fitness and for such qualities of personality and character as will enable them to fulfill their many responsibilities.

That practical, untrained nurses be employed only under competent medical or nursing supervision.

That industrial nurses in establishments where they are directly and wholly responsible to executive officers rather than to industrial physicians be granted such authority and receive such support as may be necessary for the development of their fullest usefulness. That industrial physicians remember that the industrial nurse must be more than a handmaiden of the medical profession.

That medication without the individual or standing orders of a physician should be prohibited in industrial establishments as it is in law.

That encouragement and assistance be offered by industry to industrial nurses in their efforts to maintain contact with progressive movements in their rapidly developing profession.

That visiting nursing be considered as a normal function of industrial medical service to be exercised as required or desirable.

That industrial visiting nurses be rated as medical department personnel. That they visit the known or suspected sick and be not employed for routine absence follow-up from employment departments.

CLERICAL PERSONNEL

Clerical personnel of medical departments in Cleveland is limited. It is about as rare and found in about the same places as adequate dispensary records. Seven firms employ a total of fourteen clerks in connection with industrial dispensaries. Efficient health administration is as dependent upon proper dispensary records as efficient production and sales methods upon proper cost accounting.

In all industrial dispensaries there is need of some clerical work. Nurses and physicians are trained for medical service. If clerical work is excessive it should be performed by clerks and not by the medical or nursing staff.

DISPENSARY EQUIPMENT

No detailed consideration of the equipment of industrial dispensaries is included in this report. Excellent work can be done with meager equipment and worthless work in the midst of much white enamel.

It has been a matter of some interest that with a few exceptions the medical departments rendering the best service in the city are in poor quarters and possessed of inferior dispensary fittings. The equipment of many of the most elaborately furnished suites has apparently exhausted the interest and thought of those responsible for medical administration.

It is certain that an efficient staff will be aided by adequate and convenient equipment as well as by quarters which are accessible and sufficiently large for the number of cases to be handled.

Most of the industrial X-Ray work in the city is done by hospitals or firms specializing in this service. A small number of firms have installed apparatus for such purposes as radiographing teeth or minor injuries. Several establishments have apparatus enabling them to do practically all grades of X-Ray work.

Few dispensaries have even limited clinical laboratory facilities. There are probably not more than five such laboratories in use.

One private ambulance has been ordered by a large industrial organization. The inadequacy of ambulance service in the city is not infrequently a source of annoyance and even danger in the transfer of injured workmen to hospitals. Especially apparent is the need of trained ambulance attendants. There is much reason for believing that the industries of Cleveland could be served much more satisfactorily than at present by a centralized ambulance call system, the cars of such a system to be operated by a single agency or controlled jointly by the hospitals of the city.

COST OF SERVICE

Though many of the results of industrial medical service must be reckoned as intangible, there are ways in which the quality of service which is rendered may be checked, as well as certain effects upon employment and insurance costs to be noted. Through these means may be obtained an approximate estimate of what the service is worth.

It is more simple to secure accurate figures regarding the cost of service. There are several plants in Cleveland efficiently applying cost accounting to medical departments and it is in these few plants alone that there is definite knowledge of the total outlay for medical work. Other firms may roughly calculate the cost by guessing at the value of medical supplies purchased or on hand and adding to that amount the salaries of personnel. In most establishments there is the greatest vagueness regarding costs of service, occasionally combined with a fanciful exactness regarding the benefits derived.

A number of firms stated the cost to be in the neighborhood of five dollars a year per employe, but this amount, it is interesting to note, is relatively constant, independent of the size of the plants, nature of products, types of workers or the extent and quality of service rendered. In one large establishment the cost is \$10.92 a year per employe and in another \$11.23. Such amounts are probably not excessive at the present time if the service secured is comprehensive and of a high order.

ADMINISTRATIVE RELATIONS

The ultimate utility of a medical department is certainly to some extent determined by the place which the department occupies in the industrial organization, though it must be recognized that all plants are not conducted along the lines prescribed in the schematic plan of administration. If a medical department is to develop and render more than relatively insignificant service it must have at its head a responsible executive in whom is vested suitable authority.

As it is the function of this executive to conduct operations relating to the maintenance of a healthy staff of employes, it would seem reasonable to select for the office a properly qualified physician. Not infrequently medical departments are administered by laymen who direct the activities of subordinate physicians, a practice which may be compared to the employment of a good foundryman to superintend a draughting room or of a capable pipe fitter to direct the tuning of a piano.

If it is not feasible in any particular industrial organization to make the medical head of a medical department directly responsible to a general executive, he should at least have authority to control the policies and methods within his own field.

In Table IV. are shown the administrative relations of a number of industrial medical departments in Cleveland. Reasonably accurate information regarding fifty-six organizations has been tabulated. In certain establishments the duties of executives are not well defined and it has been necessary to determine rather arbitrarily the classification of the administrative relations of a few medical departments.

Under "Administration" are included medical departments responsible to general administrative bodies as executive boards and to general managers. "Production" is inclusive of factory managers and superintendents. "Employment" includes welfare departments, service departments, employment and industrial relations managers. "Claims" includes pension and accident departments.

Almost half of the medical departments classified are responsible to some form of employment service, 78 per cent are responsible to either such employment service or to general administrative officers, while only 17 per cent are responsible to production. In an extensive study of industrial medical service by C. D. Selby in 1919, 41 per cent of a group of medical departmen

were found to be responsible to production, 16 per cent to labor relations and 18 per cent to administration.

Though conditions within individual organizations must in great measure determine the relation of medical departments to various executives, it has appeared that the best developed medical services have been in departments headed by full-time physicians directly responsible to general administrative officers. It is to be accepted that such departments must cooperate closely and harmoniously with related plant activities. If no full-time physician is employed the medical department may well come under the supervision of the company officer or executive charged with labor relations.

The heads of two medical departments are also in charge of the service departments of their respective establishments. Such an arrangement may be successful, as in these instances, under favorable circumstances and when the chief surgeon and service head is an able executive, but it is not one to be commended as generally applicable or desirable.

MEDICAL SERVICE IN NON-INDUSTRIAL ESTABLISHMENTS

Certain mercantile establishments of the city and a number of public utilities have developed medical services which are so similar to those found in industry that they may be considered as within the scope of this survey.

In Table V. of the appendix is set forth a summary of the statistical findings covering these groups. Contrary to the condition prevalent in manufacturing establishments, mercantile medical service is concerned more with the health of employes than with accidents. It affords an excellent opportunity for a demonstration of the value and possibilities of medical service as distinguished from that essentially surgical.

Medical departments have not to this time been developed in the construction trades though the health and accident hazards are notable. A beginning has been made in Cleveland, though not, however, by a Cleveland construction firm.

There are in Cleveland about twenty thousand workers in the construction trades. For many of these the work is arduous and hazardous and demands continued exposure to inclement weather. Both health and safety of construction labor are frequently imperiled. Small injuries are numerous and serious accidents common. Extensive construction enterprises involve the housing of workmen and necessarily special problems of sanitation.

Wages in the construction trades are high and the time lost by injured workers is a costly factor. The loss incident to the absence of men from their jobs, sent away for the dressing of small injuries is alone great. To this must be added the cost of turnover from more serious accidents and from ill health, and the burden of numerous fatalities.

There could be developed on construction jobs medical service somewhat similar to that of the army in the field. Portable dispensaries could be installed where needed, suitable light equipment provided and medical and surgical care thus made available for sick or injured workmen. It is a matter of great concern to individual workers, to construction firms and to public health authorities.

MEDICAL SERVICE BEYOND THE PLANT

Industrial medical departments are in most instances established and manned to furnish surgical care for industrial injuries. As previously indicated, there has been relatively slight development of service purposed to care for the health of operatives. There has been in Cleveland almost no consideration of the health of employes beyond the confines of plant property except through the ministrations of a few visiting nurses.

It is of course difficult to determine the limits of the social orbit of an employe, an orbit touching many interests, work, home, church and recreation.

In this connection it is of interest to consider the curious philosophy of many employers who rather belligerently assert that they have not concerned themselves with the health of their employes because that is a private affair; that if the men received good working conditions and good wages they receive enough; and that besides there are in the city men who have secured training for the medical profession, implying that in consequence the community is in duty bound to support these physicians regardless of their merits. Yet the same employers turn to show proudly their company cooperative stores where food and clothing are sold at cost, or at a trifling profit, food for the worker and for his family. The implications in this case are probably that food and clothing are not to be regarded as private affairs and that the community does not owe storekeepers a living.

The employer who has joined with his employes to enhance the purchasing value of wages by sharing in the operation of a cooperative store has but few mental steps to tread till he faces an opportunity to secure for his employes that which is as necessary in their lives as socks and canned tomatoes—a fair chance for health and for competent medical care at a reasonable cost.

It should be possible for employers and employes together to arrange for the establishment of industrial dispensaries, for the securing of medical and nursing personnel and for the conduct of such dispensaries upon a mutually satisfactory basis. A dispensary of this nature might be limited to the full medical care of employes or might increase its resources to include the care of employes' families. The extent of medical and nursing service and the apportionment of cost are details which any representative fair-minded body could readily determine.

There are in Cleveland at least two mutual benefit associations which participate in the administration of plant medical service. One is, in its

plan, but little above the level of the old-time lodge practice, the other is the most promising industrial medical service in the city. One of these mutual benefit associations employs a physician whose office is provided by the company and who for a small annual sum contributed by each member renders service to members of the association, services necessarily limited. Employees who are not members of the mutual benefit association may consult this physician, but upon a fee basis.

In the other organization cited, the plan is to render comprehensive medical service of the highest type, employing physicians and nurses in such numbers as may be required to insure adequate and prompt treatment of employees. It is contemplated that later, service shall be available for the members of employees' families.

INDUSTRIAL MEDICAL RECORDS

There is such a thing as accumulating useless statistical material, of multiplying indices and cross indices, just as there is the considering of problems by guess work when they are considered at all. There is also such a thing as keeping an accurate record of important facts and of summarizing the data so made available in such a manner as to render them possible of intelligent interpretation. It is a safe assumption that the industries of Cleveland have not attained their present eminent position by the universal application of the sort of administrative methods which are generally found in their medical departments.

There are several establishments in Cleveland in which essential data regarding injuries and illness incurred by employees are recorded and the findings so tabulated as to be of significance and great value. There are numerous establishments with thousands of records so inadequate, confused and inaccessible that they are practically worthless; and there are others which keep no records worthy of mention, yet expend a total of many thousands of dollars for the purpose of safeguarding the physical welfare of employees.

The conditions in various plants, such as the type of industry, of organization, of personnel and of medical service, all enter into the consideration of dispensary records and forms for records. It is probably futile and not desirable to hope for general adoption of any uniform record system, but there are a few minimum standards for good industrial medical practice just as there are for good hospital practice. Industrial medical records should indicate the recognition of such standards.

It is not within the province of this report to set forth dogmatically a list of standards for industrial medical records, but several suggestions may, however, be submitted.

Records concerning individuals should be so filed as to be readily accessible. This may entail a cross index by name if records are filed by case number or shop number. Individuals may well be identified by name, number, department, nationality and address. It is very desirable to state the actual process upon which an employee is engaged.

Dates of injury, illness, treatment and discharge should be set down.

Adequate, though possibly brief statements should be made regarding treatment, such as dressings or medication. Progress notes are valuable.

Accurate diagnosis, by standard nomenclature, should be required. "Deferred" and "provisional" diagnoses should be supplemented by more accurate opinions. Condition of the case at discharge should be stated.

Whether the record form be a card filed separately or in a folder or a sheet bound loose-leaf fashion or filed folded or flat is a matter for each organization to consider. Good records are kept in any one of these ways.

There is much to be gained by filing all of the data relating to an individual in one place. A fairly prevalent custom is to make out a new form for each new accident or illness without reference to the previous history of the individual concerned. In many instances the custom can be well justified but in general it is not good practice, especially in regard to medical cases, to ignore an available case history.

Ample evidence warrants a gentle caution against indiscriminate "elimination of paper work." A certain amount of paper work is a good thing; it saves other kinds of more arduous work.

Industrial medical department forms are of practically unlimited variety as to shape, filing system, purpose, content and degree of usefulness. The forms collected in Cleveland in connection with this survey may be roughly classified into several groups.

(a) Forms used to get injured or ill workers from the plant to the dispensary. They include passes from timekeepers and foremen, with or without provision for record of time elapsed in transit. Some include space for description of the accident incurred. In large plants it may be found very desirable to have some sort of a check on the time consumed by employees in coming to the dispensary and in returning to work. An ingenious shirker can occupy several hours in negotiating the short distance between his department and the plant dispensary. It is to be remembered, however, that as little difficulty as possible should be thrown in the way of patients which might deter them from making free and prompt use of the dispensary. Infections and prolonged disabilities are the penalties. Official statements regarding the percentage of industrial injuries in Ohio which have become infected and regarding the influence of infection on the production of permanent disability offer matter for serious and thoughtful attention. A bulletin of the Industrial Commission of Ohio published March 1, 1917, stated that of 73,525 industrial accidents for which awards were made by the Commission for the year ending June 30, 1915, infection was reported in connection with 7,073 cases, approximately one-tenth of all accidents. Of these 7,073 cases 39 resulted fatally, 161 in permanent partial disability and 6,873 in prolonged temporary disability.

(b) Forms used for follow-up to insure the return of cases needing continued dressings or treatment. These include hospital passes and cards patterned after the conventional time card, used in racks, one for a case, and "pulled" by the dispensary nurse when a patient has received his appointed treatment.

(c) Forms for case records, medical, surgical, dental, ocular or for special studies. They range from simple cards to elaborate forms upon which positive findings may be indicated by signs.

(d) Forms for physical examinations. Such forms vary with the purpose for which physical examinations are performed. They also vary with the training and the professional hobbies of their medical authors.

(e) Forms for preliminary and final reports on cases. Usually for the purpose of informing compensation departments regarding the nature of injuries and the progress or termination of cases. Occasionally include a statement of professional fees.

(f) Forms for periodic reports to executive departments. They, for the most part, present a somewhat curious selection of data and, as with the case of many other forms, are of unknown executive origin.

Industrial accidents and disease, as well as non-industrial accidents and illness, are important and costly matters concerning employes and their employers, affecting as they do not only the well being and income of individuals but also operating costs through lowered morale, absenteeism, increased turnover, lowered production, faulty goods, medical care and insurance rates. It would appear to be a subject of genuine interest to progressive employers, but the supposition is not borne out in the records of many industrial medical establishments. Even though ample material may be at hand in the files of the medical departments it is seldom summarized and tabulated in monthly or other periodic reports in such fashion as to furnish responsible executives with sound bases for comparative judgments.

For example, there is rarely careful discrimination between numbers of individuals, numbers of cases and numbers of dressings, treatments and visits. There is rarely a comparative statement of accident and illness incidence based upon some common factor, such as a hundred or a thousand full-time workers. A relatively small department of a plant showing apparently a low accident incidence may in fact have a very high accident rate. There is rarely in periodic reports a differentiation between trifling and serious accidents, yet more important than the frequency rate is the severity rate indicating the time lost. This may be illustrated by the machine trades in which the number of accidents causing an immediate loss of time of less than one day is much greater than the number of serious accidents, perhaps ninety to ninety-five per cent of the total. Though an important group of injuries, these trivial cases are not reportable to the Industrial Commission and do not figure in an estimation of the severity rate. Thus the machine trades, having a fairly high accident severity rate, have a still higher accident frequency rate because of numerous accidents, each causing disability for a short period.

These more accurate reports of medical department data do not demand the attention of skilled statisticians. They can be very satisfactorily compiled by industrial nurses or clinic clerks with possibly occasional supervision or assistance.

There is much to be gained from the general adoption of some uniform basis of reckoning for accident and sickness statistics, and at the present time there appear no more authoritative standards than those employed by the Bureau of Labor Statistics of the United States Department of Labor. These include the standards of the Committee on Statistics of the International Association of Industrial Accident Boards and Commissions regarding tabulable accidents, diseases and injuries; what shall constitute a full-time worker; the computation of the number of man-hours worked in an establishment and a scale of time losses for weighting various industrial accidents.

According to these standards the accident frequency rate expresses the number of tabulable accidents incurred per 1,000 full-time workers, a full-time worker being one who works ten hours a day, three hundred days a year. The accident severity rate expresses the number of days lost through tabulable accidents for each full-time worker per year.

The utilization of this method of tabulating accidents and illness would enable executives to estimate accurately the losses from these sources by departments, by processes, by various time periods, by day and night shifts, by nationalities, or in other ways; would enable them to compare their losses with other similar establishments or with other industries.

Complete and recent reports of accidents in Cleveland have not been available, but a bulletin published by the Industrial Commission of Ohio in 1915 presents an analysis of reportable industrial accidents occurring in Cuyahoga County from July to December, 1914. Computations based upon the figures of this report indicate an accident frequency rate of 93.7 accidents per 1,000 workers per year, and an accident severity rate of 4.53 days lost per worker per year. (Table VI., Appendix.)

Through the courtesy of the Industrial Commission advance figures have been received indicating the number of reportable accidents occurring in several groups of plants located within selected important industrial areas of the city during the period of June 1, 1919, to November 30, 1919. The industries represented were quite diversified, though for the most part they were engaged in the manufacture of metal products. These figures, which are presented in Table VII. of the appendix, indicate for a total of 54,091 employes, an accident frequency rate of 201.7 accidents per thousand workers per year, and an accident severity rate of 2.6 days lost per worker per year.

Detailed information regarding the computation of accident and illness frequency rates and severity rates may be obtained from the Bureau of Labor Statistics in Washington.

ABSENTEEISM DUE TO SICKNESS

There is little question in the minds of those deeply concerned with problems of industrial health that the greatest present need in this field is for the accumulation of accurate and extensive data regarding absenteeism due to sickness and non-industrial accidents. It is not always easy to obtain. In one Cleveland plant unusually satisfactory reports of illness are obtained by conditioning a portion of an attendance bonus upon the prompt reporting of cause of absence, with a penalty for false reporting. In another establishment all absentees are questioned by the employment department upon their return to work regarding illness or other cause of absence.

In another organization all employees absent over a certain period return through the medical department. Numerous plants obtain much valuable information regarding absenteeism due to sickness through follow-up personnel, either nurses or visitors working from the employment offices. It is necessary that there be close coordination of the medical and employment departments, and of importance that all facts secured be recorded and incorporated with the records of individuals in the medical department.

The subject is one which has been rather studiously neglected by employers who customarily state that non-industrial sickness is not of their concern and, like the medical care of such illness, is wholly a private affair of employees. This is questionable.

In recent years there have been numerous careful investigations into the incidence and duration of absence due to non-industrial accidents and illness of industrial workers. These studies have shown that there is an average time loss per worker usually ranging upward from six days per year. Seven days of lost time a year is probably a conservative estimate for all industries. One set of authoritative figures, based upon consideration of over half a million workers, places the time loss at nearly nine days per year per worker.

These are averages. In certain trades and among certain nationalities the loss may be less or greater.

If to a time loss of seven days for non-industrial accidents and illness there be added an estimated loss of four days for industrial accidents, there is a total loss among the industries of Cleveland of approximately two and a fifth million days a year. When to the two hundred thousand industrial workers are added the many thousands employed in the public utilities, in mercantile and commercial establishments, in the construction trades and in transportation, there is a most impressive total of time loss, with its attendant economic loss to employees, employers and the community as a whole. This loss is not of wages and production alone for to it must be added the burden of medical and social care placed upon numerous individuals, physicians, nurses, hospitals and other institutions.

Estimates of actual time lost must be supplemented by consideration of the intangible but noteworthy losses due to non-disabling poor health and

physical and mental defects. The findings of the examiners of draft registrants in 1917 and 1918, indicating 468 men per thousand with important physical or mental defects, are significant.

It is reasonable to believe that these evidences of sickness and accidents could be materially reduced by applying intelligent and simple preventive measures and by providing a better mechanism than now exists for the care of ill health. Even were the burden so evenly distributed that the ardent champion of the rights of the individual might justly argue that each citizen bore only his proper share and so should be responsible as an individual, there would still be ample reason for developing health and safety education and better means of providing medical and nursing care.

The burden is not evenly distributed. An illustration may be found in Table VIII. of the appendix where are compared the accident incidence of the construction trades and that of the metal trades in Cuyahoga County, as published by the Industrial Commission. This comparison indicates an accident frequency rate in the construction trades over twice that of the metal trades, and a severity rate four to eight times as great, the variation being dependent upon various assumptions as to the length of the working day for workers in the construction trades.

It may be pointed out that industry presents an unparalleled opportunity for the detection and remedy of defects, for the observation of disease in its earliest recognizable stages and for the institution of measures for the treatment of such disease. In no other way than at work are so many persons brought frequently together in groups, each group constituted of individuals living much the same sort of life under similar conditions.

It is recommended by the Survey that industrial, mercantile and other establishments proceed to collect data regarding the incidence and nature of sickness and accidents among employes causing absence from work. This information may later be analyzed with great profit by individual organizations, and the findings of individual establishments may be available for consolidation and study by such groups as associations of employment managers, industrial physicians and other interested agencies.

PHYSICAL EXAMINATIONS

It is essential for efficient public health control that there be knowledge of the community's physical constitution, of its defects, of menaces to the public health. So does efficient control of the health of the individual rest upon knowledge of the physical condition of the individual. It is of course possible without this knowledge to maintain certain general safeguards, but they are of necessity inadequate and probably frequently misdirected.

If men and women, and especially children, are to labor under conditions which do not work undue detriment to their health it is of the greatest importance that there be such continued observation of their physical state as will lead to the prompt institution of corrective measures following detection

of ill effects. This can no more be done without initial physical examinations than can the running time for a race be recorded when the moment of starting is not noted.

There has been much opposition to compulsory physical examinations exerted by organized labor, usually the expression of feeling that the examinations might be made an instrument for discriminative action against individuals considered by employers to be undesirable. Without doubt physical examinations have been at times the occasion of injustices, but there are now thoughtful men in the labor group who have affirmed their belief in the value of physical examinations when fairly conducted and not instituted for the elimination of defectives.

Ohio manufacturers are unusually strengthened in their position of being able to accept practically all labor applicants, by the operation of the Workmen's Compensation Act which does not penalize the employer of a defective workman who incurs by accident a loss to a single remaining paired member, by charging against that employer's compensation account a claim for the total, double loss.

The findings of the Survey are that eleven industrial organizations in Cleveland conduct compulsory physical examinations. A small additional number offer optional examinations. It is of importance that in practically every instance the only bases of rejection were of the following nature:

- (a) Communicable disease.
- (b) Conditions which would render the applicant, if employed, liable to personal injury or harm.
- (c) Conditions which would render the applicant, if employed, a menace to the health or safety of fellow workmen.
- (d) Unreasonable lack of personal cleanliness.

The second and third reasons for rejection have not been frequently operative, partly because of the labor shortage and partly because in large establishments there can be found suitable work for almost any defective.

There are in the files of the Survey the names of scores of firms employing cripples and persons handicapped by orthopedic conditions, deaf and dumb, partially and totally blind and even pronounced and recognized mental defectives. Selective placement is not always made with desirable precision, but it is in a general way the purpose of numerous large establishments.

Ohio law requires that "no person suffering from or afflicted with tuberculosis, a venereal or a contagious disease, shall be employed in or about any part of a restaurant or its kitchen or handle foodstuffs or products used therein."

In the course of this study but one establishment among the leading hotels and restaurants of the city has been found in which physical examina-

tions are conducted, and that a department store restaurant. Various managers evinced genuine interest in examinations, but found their labor so highly mobile and scarce as to deter them from pursuing the matter.

There are, however, many deaths reported from tuberculosis among cooks, bakers, stewards and waiters, a sufficient number to suggest that existing active cases are widely distributed among the members of these occupational groups. One large group of food handlers, apparently recognizing that many of its members were suffering from or afflicted with communicable disease, appealed for the cooperation of the Survey in an effort "looking to a clearing up of the situation."

It would appear to be a wide field of endeavor for the department of the State Fire Marshal, to which department the Legislature in its wisdom has committed the administration of these matters pertaining to the public health. It is recommended that the responsibility for the maintenance of health among food handlers in restaurants be transferred to the State Department of Health.

Many persons are daily imperiled because of defective vision or other disability, physical or mental, in those who operate taxicabs or other motor cars, trucks, cranes and elevators. Few of such operators are examined. The safety of that portion of the public which boards street cars and rides therein or has occasion to cross tracks is daily entrusted to a large corps of men, none of whom are examined to determine their freedom from infirmities which might disqualify them for certain types of work.

The municipal government of Cleveland is the largest single employer of labor in the city, having on its payroll approximately 10,000 men and women. As such its responsibility in connection with the maintenance of health among working people is not only a great one but very immediate. It is also grossly neglected. It is a responsibility shared by each tax-paying citizen.

The Survey recommends that the City, through its Division of Health, provide for its employes an initial and subsequent periodic physical examination with such medical and surgical care from time to time as may be deemed necessary and advisable.

It is wholly reasonable to expect of the city government a service for its workers comparable with the best medical services provided by large industrial organizations.

SPECIAL SERVICES

INDUSTRIAL PSYCHIATRY

As one of the outgrowths of careful study of the causes of industrial unrest there has come new knowledge of psychology as applied to industry and even more recently the beginnings of industrial psychiatry. Psychology and psychiatry are terms often used somewhat carelessly and it is of importance that they be differentiated. Psychology may be defined as the study of

states of consciousness, but is ordinarily limited to consideration of normal processes. Most psychologists are not physicians. Psychiatry is the study of abnormal, pathological mental processes and conditions. Most psychiatrists have been trained as physicians.

Military surgeons during the war found that men whose mental equipment was not such as to permit them to withstand military discipline and routine had not infrequently checkered industrial histories, having held many jobs and no job for a long while. Carefully studied, in many instances these individuals proved to be of psychopathic type. In industry they had probably been called unruly, inefficient or lazy.

When upon deficient mentality are thrown the burdens of fatigue, of unhealthful working conditions, of real or fancied injustices and of economic uncertainties, it is rather to be expected that unrest results.

In a realm of science so beset with difficulties as is psychiatry, complicated in an industrial environment by many different factors, progress will likely be slow, but the development of this field warrants earnest consideration by industry. It is not a subject to be approached by the inadequately trained or by the casual enthusiast.

There have been in Cleveland at least two employers who have made extended use of psychometric tests and over such a period of time as to justify, apparently, the continued use of these aids to employment and placement. In neither organization have the tests been considered as other than one of several gauges of the fitness of applicants.

INDUSTRIAL DENTAL SERVICE

The public in recent years has come to realize in some degree the importance to health and self-respect of good teeth and high standards of mouth hygiene. This interest has been reflected in the development in industry of dental clinics and in the importance which is attached in many establishments to the care of the teeth of employes. While a casual inspection of the teeth is a part of every reasonably thorough physical examination, several firms have installed dental chairs and employ capable dental surgeons to inspect the teeth of all recent employes. Four manufacturing and one mercantile establishment in the city maintain dental service. The amount and kinds of work performed vary with the establishment but are in every instance limited to nothing more costly than amalgam fillings. The cost is borne either entirely by the employing company or shared by the employes who pay a moderate sum for materials used.

It is a service which is generally enthusiastically endorsed by the organizations which have installed it and it is one which merits wide adoption.

INDUSTRIAL OCULAR SERVICE

Several industries in which fine work demands good vision have found it sound practice to secure for their employes the services of competent oculists, not only to determine the grade of vision at the time of employment, but also

to re-examine workers from time to time to secure by glasses proper correction of refractive errors. Five firms maintain oculists for work of this nature, but many more make use of oculists as consultants or refer to them serious eye injuries. In far too few instances are these serious eye cases promptly referred. Inquiry recently made indicates that a large portion of industrial eye injuries referred to ophthalmologists had been previously mishandled. Industrial Commission figures for the state at large have shown that eye injuries made up 22 per cent of the cases of permanent total disability, 8.9 per cent of cases of permanent partial disability and 10.9 per cent of the cases of temporary partial disability. In a study of the influence of infection upon disability, it was found that 18 per cent of the cases of total or partial loss of vision were due to infection.

The neglect of vision begins early in many industrial plants. The Snellen chart as generally used is one of a number of false gods before which a succession of company officials reverently bow. If the chart is veiled in dim obscurity, the almost superstitious regard for its subtle values is the greater. Snellen charts hang in sunny offices or in half-lighted basements; some illuminated at the top, some at the side; some by glaring light, some by moribund filaments.

There are in Cleveland a number of able oculists who are greatly interested in industrial eye injuries and a number in the safeguarding of the vision of industrial workers. More use should be made of them.

There is no hospital in the city devoting a special service to the care of eye cases, though such cases are occasionally received in seven general hospitals. One hospital only regards certain beds as belonging to the eye service, holding four beds in a surgical ward for this purpose. Five hospitals have magnets for the removal of metallic foreign bodies.

Cleveland is greatly in need of an eye hospital and the almost unanimous and generally emphatic statements of the oculists of the city regarding the desirability of such an institution warrant a favorable response from the community.

TUBERCULOSIS

In an industrial population as large as that of Cleveland it is certain that there are a considerable number of cases of tuberculosis, yet in the establishments conducting physical examinations the number of cases observed is almost negligible. They have presumably been overlooked either because the examinations have been made too casually and hastily or because they have been made by physicians ill qualified to examine for pulmonary disease.

Reports of the municipal Division of Health offer evidence that large numbers of industrial workers are dying of tuberculosis. As no data are available regarding the numbers of reported cases for occupational groups or detailed information concerning the numbers of various types of workers in the city, no fatality or mortality rates can be given.

It is to the interest of those afflicted as well as their companions at work that reasonable measures be taken to identify persons with this disease and to assist them in securing proper care. The incipient cases must be sought with special diligence, for in such cases there may be slight evidence of illness to attract the attention of foremen or fellow workers.

The physician who conducts examinations must have sound knowledge of chest conditions or the examinations will be more or less futile. Not all physicians have this knowledge and while it is in a sense unfair to generalize, it is safe to say that a very large portion of the surgical group of the profession and a somewhat smaller portion of the medical group know little about the diagnosis of pulmonary tuberculosis, except possibly in its well advanced stages.

It should be wholly practicable, however, for industry to make frequent use of expert consultants who might review groups of doubtful cases selected by plant physicians.

The opportunity of industrial medical services to cooperate in the reduction of tuberculosis is a very valuable one. In Cleveland little utilization has been made of it. There is awakening doubt of the blissfulness of ignorance in regard to this preventable disease which is alone the cause of a fifth to a quarter of all the deaths occurring in the working-age groups.

VENEREAL DISEASE

The activity during the war, of the United States Public Health Service, in connection with its extensive program for the combating of venereal disease unfortunately did not stimulate a sustained interest in the subject among employers. There are probably not more than two or three establishments in Cleveland in which venereal disease is of more than trifling concern. Yet Cleveland is not a community distinguished for its freedom from venereal disease and from the conditions which foster it. Nor is venereal disease without influence upon the efficiency of working people and upon absenteeism. Like defective vision, and tuberculous lungs, venereal disease has been considered a personal affair of the worker, another inviolable right of the individual.

Though much of the traditional prejudice against frank and honest care of venereal disease has fortunately passed, it is still in practice difficult either to secure reporting or to conduct the treatment of cases in industrial dispensaries. There are, however, no insurmountable difficulties in the way of tactful and straightforward educational work with advice regarding the accessibility of centers for diagnosis and treatment. This is a reasonable function of industrial medical service.

THE REHABILITATION OF INDUSTRIAL CRIPPLES

The analogy of industrial casualties to those of war has frequently been pointed out. Though this has long been a matter of comment and there

has been a lively interest in the care of military cripples, governmental agencies have been slow to evince any realization of the economic and social folly of scrapping the cripples produced in industry.

There has been scant development in Cleveland of methods for the treatment of industrial injuries calculated to restore the injured to the fullest possible function in the shortest period of time compatible with good surgical practice. There has been limited application of the knowledge gained elsewhere in recent years of rehabilitative methods and devices. There has been in the community and in its leading medical centers an unfortunate neglect of orthopedic surgery with consequent loss to the community of services of a special nature which the community has reason to expect. Medical centers, teaching and others, hold a public trust.

THE SMALL ESTABLISHMENT

The employer of less than two or three hundred workers seldom feels justified in making the expenditures necessary for a plant dispensary installation and for the maintenance of the needed personnel, even though he realizes that his employes are exposed to certain hazards, and when ill or injured do not receive proper care. Considerations of economy may lead him to abandon his desire to have physical examinations of applicants for employment, suitable placement of the less fit, prompt and efficient medical and surgical attention, visiting nursing service and health supervision in his plant.

Ninety-four per cent of the industrial organizations in the city employ less than five hundred workers each, a total of 83,711. (Table I., Appendix.)

Eighty-eight per cent employ less than 200 each, a total of 51,682.

Eighty percent employ less than 100 each, a total of 41,000.

The need of great numbers of these smaller organizations for medical service of a high order could be met by the establishment of industrial dispensaries at various points in industrial districts, carefully selected with regard for accessibility from the plants which each dispensary would serve.

The greatest agglomeration of small industrial establishments in Cleveland is in the heart of the city. Within a radius of a mile of the Public Square there are 536 establishments of various sizes, employing a total of 34,131 workers. Of these plants, 459 employ less than 100 each; 505 shops employ less than 200 each, 94.2 per cent of all establishments in the area, 53 per cent of the employes, an average of 36 workers per establishment.

Basing an estimate upon Industrial Commission figures for accidents occurring in plants of this group, there is an annual time loss for industrial operatives from reportable industrial accidents of approximately 16,000 days, an annual total of 22,400 accidents of all grades; and a time loss from all accidents and illness of over 250,000 days. Plant medical service now reaches less than 8,000 of the operatives in this area through eight dispensaries employing a total of ten industrial nurses, two full-time and four part-time physicians.

Quite comparable for density of industrial population with this central area of the city is the region about Forty-fifth Street and St. Clair Avenue. Within a radius of half a mile of this point are employed a total of 21,100 operatives in 114 establishments. Of these plants, 71 employ less than 100 workers; 89 employ less than 200, being 77 per cent of all the shops in the zone, employing 22 per cent of the employes, an average of 53 in each plant.

The estimated annual time loss for industrial operatives from reportable industrial accidents occurring in this area is 38,345 days. There is an estimated annual total of accidents of all grades of 53,340, with a time loss from all accidents and illness of 186,000 days. Plant medical service now reaches a little over 7,000 employes in this region, through eight plant dispensaries and the services of four industrial nurses and eight part-time physicians.

The area of density of industrial population extends southward from this region about Forty-fifth Street for a depth of three or four miles from the lake front. Statistics similar to those presented might be furnished for other circumscribed areas within this belt.

Though there are many physicians practising within this large zone and in other parts of the city which are thickly set with industrial plants, there is at present no industrial dispensary conducted upon an essentially cooperative basis.

It would be the recommendation of the Survey that the general administration of such a cooperative dispensary as has been suggested, or of such dispensaries, be in the hands of a commercially disinterested body associated with a controlling board representing employers, employes, physicians and the administrative organization. The administration might be the responsibility of a general hospital or of any one of several recognized and trusted public agencies of which the local chapter of the American Red Cross may be considered an example.

Such a dispensary should be self-supporting, and though paying salaries and fees sufficient to command the services of able personnel, should not be conducted for profit in the customary sense. It should have such professional supervision as would assure the rendering of efficient service.

The first requirement of the dispensary would be the care of industrial injuries, with surgeons and nurses in attendance in such numbers and at such times as might be needed. It would be wholly feasible, however, to extend the service to include, if desired, physical examination of applicants for employment or of employes, mental examinations, medical care of industrial and non-industrial sickness, dental service, ocular service and visiting nursing.

The cost of installation and maintenance should be guaranteed by the industrial establishments participating, but it would in part be returned by the Industrial Commission in payments for service rendered under the Workmen's Compensation Act.

If established for a group of two thousand employes the cost of maintenance would be approximately that of medical service in a single plant employing a similar number of workers, between five and ten dollars a year per employe, though of course the amount would vary with the range of services offered.

INDUSTRIAL HOSPITALS

Cleveland is at present greatly in need of additional hospital beds. With the consequent demand, it is wholly to be expected that serious industrial accident cases are frequently peddled about the hospitals until a vacancy is found. As the larger part of such cases come within the provisions of the Workmen's Compensation Act, enabling the Industrial Commission to pay for certain surgical and hospital services, and as the amount customarily paid by the Commission approximates, in most instances, half or less than half of the actual cost of maintenance in hospital, it naturally follows that a financially pressed institution offers the injured workman its minimum services which may or may not be adequate.

Not all industrial surgeons hold staff positions in the hospitals of the city and some who do not have experienced difficulties in performing the services for which they are employed because of the necessity of relinquishing their responsibilities to the hospitals with which their patients are placed.

Inquiry made by the Survey has confirmed an impression that there is a field in Cleveland for one or more hospitals to be established and maintained for the care of industrial cases exclusively. It is suggested that such a hospital could best be administered either by some present existing hospital organization in which there is general confidence or by a board of control of representative character. It is of importance that the professional standards of such an institution be high for the medical, nursing and laboratory services, and that the hospital be open to all qualified industrial physicians who are willing and able to practise according to the established standards.

Conducted for industrial cases, staffed and visited by skilled industrial physicians and surgeons, such an institution should make available a type of service needed but not at present found in the city. The opportunities which would be presented for attention to such matters as ambulance service, the use of interpreters, the treatment of industrial eye injuries, of severe burns, the development of physiotherapy and other rehabilitative measures; would alone commend the project to many persons who have had occasion to follow the progress of cases of industrial injury under existing hospital conditions.

THE TRAINING OF INDUSTRIAL PHYSICIANS AND NURSES

It has been evident, perhaps, that industry makes certain special demands upon the physicians and nurses who serve therein, demands with which most physicians and nurses not in industry are unfamiliar and which they are not trained to meet.

There is a rapidly growing need for the services of industrial hygienists, men who have studied the toxic effects of various poisonous substances such as are now used in many industries; men who are competent to consider such problems as those of the effects of dusts and fumes, of ventilation, of illumination, of fatigue and of factory sanitation. These are matters which most industrial physicians are not qualified to handle intelligently and thoroughly though they may from experience be able to express a valuable common sense opinion.

While the nurses who are graduates of good hospital training schools may quickly become proficient as dispensary nurses they are by no means prepared to assume readily the duties and to comprehend the many responsibilities which are now properly those of a well equipped industrial nurse.

Special instruction is required for the rapid training of industrial physicians, hygienists and nurses, and it is to be hoped that the existing facilities of the Western Reserve Medical School may be expanded and supplemented to permit of such instruction to graduate physicians and nurses within the coming year. Certain portions of the instruction offered to physicians might be made available to nurses in addition to courses arranged to meet their special requirements.

The industries of the Cleveland district would unquestionably profit greatly by the establishment of such a school of industrial hygiene, not only through the services of the skilled physicians and nurses which it would prepare for their employ, but through the development of research facilities which would be at their ready disposal. It is an undertaking deserving of their deepest interest and of their support and cooperation.

As a part of the reorganized hospital and dispensary service of the city there is contemplated a clinic centrally located to receive emergency cases and to offer facilities for consultation. In connection with such a consultation clinic it is the belief of the Survey that there should be established an industrial clinic where ailments of industrial origin might be thoroughly studied, to which plant dispensaries might refer doubtful cases for diagnosis and to which workers in the various industries and trades might go for authoritative medical advice.

It would be of advantage to associate this clinic closely with the prospective school of industrial hygiene in order that each might profit by the resources of the other.

PUBLIC HEALTH AUTHORITIES AND INDUSTRIAL HYGIENE

The Industrial Commission of Ohio is vested with broad powers to safeguard the health and safety of working men and women. It possesses considerable police authority. The Division of Industrial Hygiene of the State Department of Health is endowed with certain powers of inquiry but is unable to institute obligatory corrective measures. The activities of this division are unfortunately not closely correlated with those of the Industrial Commis-

sion whose inspectors are especially concerned with questions of safety and conditions of employment other than those relating to the health of operatives.

Adequate as are the powers of state authorities to make inquiries and issue orders regarding matters pertaining to the safety and health of industrial workers, there would be much gained to the industries and to the workmen and women of Cleveland through the establishment of a Bureau of Industrial Hygiene within the municipal Division of Health. It could serve in an advisory and consultant capacity, aiding in the planning of factories and work rooms and in the solution of problems concerning industrial hygiene. Such a division might well be charged with the conduct of medical service for the municipal employes such as was recommended in the section of this report relating to physical examinations. It in no sense need conflict with or duplicate with the activities of the state authorities.

Cleveland is an industrial community; the greatest common interest of her people is in her industries and those of her people who labor therein are the life of the city.

The future of Cleveland depends upon the well being and the happiness of her industrial workers and to secure and safeguard their health is the vital task of industrial medical service.

SUMMARY OF RECOMMENDATIONS

It is the recommendation of the Survey—

That industrial physicians be selected with regard for their professional and executive abilities; that they be remunerated upon a basis commensurate with the amount and character of service expected of them; that they be not permitted to combine with their official duties a private practice among the company personnel.

That industrial nurses be chosen for professional fitness and such qualities of personality and character as will enable them to fulfill their many responsibilities.

That untrained nurses be employed only under competent medical or nursing supervision.

That industrial nurses be granted such authority and receive such support as may be necessary for the development of their fullest usefulness. That medication by nurses without the individual or standing orders of a physician be prohibited. That encouragement and assistance be offered industrial nurses in their efforts to maintain contact with progressive movements in industrial medicine. That visiting nursing be considered a normal function of industrial nurses. That industrial nurses be rated as medical personnel. That they visit sick or suspected sick and be not employed for routine absence follow-up from employment departments.

That sufficient clerical personnel be employed in industrial medical departments to free physicians and nurses for professional service.

That industrial dispensaries be furnished with adequate and convenient equipment which need not be elaborate.

That some municipal or cooperative industrial service be undertaken providing efficient ambulance transportation of sick and injured to the hospital from industrial establishments.

That there be applied to industrial medical departments efficient cost-accounting systems.

That administrative relations of industrial physicians permit of free and direct access to general executives; that wherever possible physicians and not laymen direct the activities of the health service in industrial plants.

That employers and employes together arrange for the establishment and maintenance of cooperative industrial dispensaries.

That industrial medical records conform to recognized standards of adequacy and that they be filed in such manner and so summarized as to make possible their intelligent interpretation. That there be a general adoption of some uniform system of reckoning for accident and sickness statistics.

That there be study of absenteeism due to sickness and non-industrial accidents, among the employes of industry.

That physical examinations be generally adopted as prerequisite to employment, not for the purpose of the elimination of those not physically fit, but for guidance in the proper placement of labor applicants; that the conditions found in such examinations be followed up by subsequent periodic examinations.

That responsibility for the maintenance of health among food-handlers in restaurants be transferred from the department of the State Fire Marshal to the State Department of Health, or preferably, if possible, to the Division of Health of the City of Cleveland.

That there be compulsory physical examination of all applicants for positions as operators of public conveyances.

That the municipal government maintain within the Division of Health, for the service of all its employes, an adequate health service or bureau which shall be charged with the conduct of physical examinations of applicants for civil service positions, with annual periodic medical examination of all city employes, and such further medical service as may be deemed necessary.

That there be a study of the problem of abnormal mentality among industrial workers, particularly in its relations to vocational guidance and unemployment.

That there be an extension and development of industrial dental service.

That there be more extended use made of the services of skilled oculists, both in the care of industrial injuries and in the conservation of the sight of industrial workers.

That there be more extended use made of able consultant diagnosticians in connection with suspected cases of tuberculosis.

That there be a revival of interest in educational work directed against venereal disease.

That there be proper consideration devoted to cases of permanent disability resulting from industrial injuries with particular regard to the development of methods for functional rehabilitation.

That there be developed among groups of small industrial establishments some form of cooperative dispensary to operate under the joint direction of employers and employees and some commercially disinterested organization. That there be established one or more industrial hospitals exclusively for the care of industrial cases, such a hospital to permit to practice any industrial physician able and willing to meet the requirements, which should be of high standard.

That there be developed within the Western Reserve University Medical School facilities for the training of industrial physicians and nurses. That there be established in connection with some central dispensary a consultation diagnostic industrial clinic.

That there be established within the municipal division of health a bureau of industrial hygiene.

Women and Industry

By MARIE WRIGHT

INDUSTRY has become interested in the health of employes. The concrete expression of this interest takes different form in almost every establishment. One executive enthuses over rest periods, another shows every visitor the immaculate new dispensary, still another expatiates upon the benefits to be derived from hot food at noon. Any or all of these features may contribute to the well-being of the working force. They are representative of various activities which are reasonably those of industry, not to be considered mildly extravagant novelties, but essential equipment and services giving to the workers the opportunity to lead a healthful life at work as well as away from it.

There is a tendency to attribute much of the ill-health of working people to conditions under which they live when not at work. Important as is the relation of the home life of workers to their health, it must be remembered that the character of the home life is largely the result of influences growing out of their work. Home life and working life are closely inter-related. The hours of work determine the amount of leisure for improvement and appreciation of the home. Wages determine to a large extent the choice of neighborhood, of building, and often of furnishings and food. Visitors to the homes of working people are at times dismayed by their clutter and apparent lack of cleanliness, but these conditions are not necessarily productive of disease. No matter what the home of an employe may be, his employer has the responsibility of providing a work place reasonably clean, well ventilated, and with suitable conveniences. The work should, if possible, be without special hazard, but where there is danger of accident or illness as a result of any process, the employe should be informed of the risk and encouraged to guard against it in every way.

The relative susceptibility of men and women to fatigue and special hazards is a matter of opinion at present only partially substantiated by fact, but the employment of women should be safeguarded at least as well as that of men. Because of the important relation of women to present and future generations, it is generally considered that they should have especially favorable surroundings where possible. Another reason that the working environment of women should be wholesome and their occupations healthful is that they are less likely than men to spend their margin of leisure time in healthful recreation. Many girls do their washing and ironing and make or mend their clothes in the evenings. Married women and widows often work harder at housework than they do during the day.

Since in so far as employers endeavor to promote the health of employes they are promoting the public health, and since work under adverse circumstances is one of the greatest detriments to health, especially for women, a study of the work which women are doing in Cleveland and its probable relation to their health has been included in the general survey of the health situation of the city.

In order to learn the nature of the various occupations in which women are engaged, visits were made to most of the firms known to employ women in considerable numbers. Realizing that, in general, conditions in small shops are not as good as in large ones, it was nevertheless considered advisable to study conditions affecting the major part of the working women. As has been pointed out, in Cleveland seventy-nine per cent of all industrial operatives are in establishments each employing over one hundred persons. The remaining twenty-one per cent are distributed throughout a large number of small shops averaging about thirty-three employes each. (Table I, APPENDIX.) This condition is even more apparent among mercantile establishments.

During February, March, and April, 1920, visits were made to seventy-nine establishments employing a total of 22,906 women. While the study was primarily concerned with the industrial field, other types of organizations employing women were found to have problems so similar that a number of them were included. Of the employes in the establishments visited, 12,613 were in industrial plants, 6,730 in mercantile establishments, 1,458 in organizations of public service and 2,105 in public utilities.

There are no recent figures available as to the number of women gainfully employed in Cleveland except those in the Directory of Ohio Manufacturers (Industrial Commission of Ohio, 1918), and as the employment of women has fluctuated since this report was issued, its figures were not found accurate in all cases. Consequently no totals can be given for the numbers of women in various occupations for comparison with the figures from the establishments visited in the course of the Survey.

Information was obtained by means of interviews with managers, superintendents, or other executives in touch with personnel problems, and was usually supplemented by a visit of inspection through the plants. While information so obtained is general and often not exact, the collection of repeated impressions by an impartial observer is so far almost the only means of judging the subtle factors which enter into the making of a good place to work. While the attitude of executives varied, there was in general a manifest interest in the well-being of employes and an appreciation of the fact that knowledge of methods for maintaining and improving the health of workers should, by the interchange of ideas and experiences, be made available for all industry. The value of health is appreciated at a time when labor is scarce.

INDUSTRIAL ESTABLISHMENTS

It is not a new thing for women to be in industry. The war focussed so much attention upon women who were doing the work of men in factories that it is frequently forgotten that women have had a place in Cleveland's nut and bolt shops and other plants making small metal products since those concerns were first established—a matter of thirty to forty years. In the textile and knitting, garment and candy trades, women have always been a predominant labor element.

During the war more women went into factories than had ever done so before. Increased demand for the regular products of essential industries enabled manufacturers in those branches to hold and increase their forces, while women for the making of munitions were usually recruited from the "non-essential industries" or from that large body of women who had not worked before but whose patriotism enabled them to undertake successfully the new and often heavy work. Most of these women left the factories upon the completion of government orders and have not returned. The "non-essential industries" have reclaimed many of their former employes, and by now readjustment is about complete.

There are a few factories which, as a result of their war experience, have continued to employ women although they had not done so before. In the six factories where it was learned that this was the case, six hundred women are employed. Two of these factories have continued to employ the women who started to work there during the war, but as they drop out men are hired in their places, and consequently the number of women is dwindling. In another plant there are very few women compared with the number employed during the war, and the women are giving up machine work for bench work of a light type.

Within the past two years there have been established four new factories, employing a total of 698 women. Neither the retention of women in plants which had not formerly employed them, nor their employment in new factories, is sufficient to account for the present shortage of female labor. The checking of immigration and the return of many foreign workers to Europe, is a partial cause of a general shortage of both men and women. The fact that wages for men are higher than ever before means that many women do not have to work now as they did formerly, and in many cases this new independence has apparently resulted in an unfortunate attitude toward work, with a greater absenteeism and a tendency to float from job to job.

In the face of this labor shortage the cry for increased production has aroused feverish efforts on the part of employers to get help in one way or another. The alluring advertisements of "Help Wanted" contribute to the prevailing unrest, and the readiness to try a new job upon the slightest dissatisfaction with the old. Applicants from such sources do not prove satisfactory. Instead of advertising, several firms are now paying a bonus to employes who bring in friends who will continue to work for a certain period of time, recognizing the principle that a satisfied employe is the best advertisement in the labor market.

THE METAL TRADES

The largest group of industrial establishments studied was in the so-called metal trades, where the product varies from a small piece of machined steel to an assembled oil stove or an electric lamp. 3,691 women were employed in the twenty-three plants visited. The operations included bench work and assembly, as well as operating such machines as drill presses, punch presses, screw machines, lathes, and a variety of machines adapted for special processes.

Most of the work is not heavy, and the girls are instructed to lift not over ten to fifteen pounds, although they not infrequently disobey this rule. Where girls are on machines requiring gear shifts, special efforts have been made to favor ease of operation. However, there is considerable effort in the running of any screw machine or lathe, and in general it has seemed better practice for men to do that work.

Punch presses and drills are usually guarded, and relatively few accidents to women have been reported. Although no data are available as to the carefulness of women in operating machines compared with men, there is a prevalent impression that they are more careful than male operatives and that, freely accepting risks of operation, they make little complaint when injured. Nineteen of these twenty-three establishments provide medical service.

Bloomer uniforms are required in five plants and are optional in several others. The uniform has fallen into disfavor since the war, and effort is needed to enforce its use at machine work and to maintain any degree of uniformity and safety by the avoidance of jewelry, fluffy collars and ties. High-heeled shoes for standing work should also be opposed where possible by making it easy for the women to get sensible working shoes reasonably priced. Individual steel lockers are provided in twelve plants and hooks in dressing rooms in most of the others. The increased feeling of well-being and self-respect of the worker who changes from street clothes to working clothes and back again is worth emphasizing by employment or service departments.

Although several of the plants have physical examination for men, only one organization was found to give to girls anything which might properly be called a physical examination. There seems to be little realization of the impossibility of judging by appearance as to a girl's fitness for fatiguing work. With a high degree of conscientiousness, several employment departments have taken a timid attitude in this matter. The fear that girls will object to physical examinations properly conducted is with slight foundation, as they are in general use in similar establishments elsewhere, and where used in Cleveland meet with little or no opposition. If physical examinations are conducted on a reasonable basis of rejection and if their purpose is frankly explained, it is, as a rule, only the undesirable worker who will raise any objection.

The dirt and grease of machine shops, which in the minds of many people render them unsuitable places for the employment of women, are in fact not objectionable if there are provided proper washing facilities and opportunity to use them. Such facilities must include hot water.

The noise and vibration from different kinds of machinery are of relatively greater importance.

There is about many machine shops a wholesome attitude toward work which is very appealing to the sturdy, independent type of girl, frequently encountered in this industry. Many girls who worked in munitions factories testified that they had never been so happy before.

Tables XI and XII of the appendix present the findings regarding hours and starting rates for the various industries studied. The usual working day for women in the metal trades is from seven to half past four. Although piece-work is prevalent, a certain minimum daily wage is guaranteed in sixteen plants, while three others pay a guaranteed minimum wage for the earning period. There is little or no seasonal variation, but the supply of work frequently varies with orders.

Some factories employ American girls almost exclusively, others only foreign born or those of foreign parentage. Usually all nationalities are presented, but for heavy, dirty work the foreign women of peasant type are in greatest demand. Colored women are employed in two plants in considerable numbers.

TEXTILE AND KNITTING MILLS

The female operatives of the textile and knitting trades constitute an important group of working women, numbering 4,642 in the eleven establishments visited. The knitting mills seem in almost every case to be working beyond normal capacity. In a number of instances mills were working under great pressure upon goods for delivery a year hence. Supposedly as a result of the increased activity, work-rooms were cluttered with piles of unfinished work, and there were evidences of poor factory housekeeping.

The numerous exposed overhead belts furnishing power to circular knitting machines seem to be an unnecessary accident hazard for the operatives who are constantly obliged to move about under them.

The brightly colored fluff from the yarn is everywhere on the machines, and at times adheres noticeably to the faces, arms, and hair of the girls. Occasionally they develop sore hands or arms, said to be caused by the fluff. In one plant mention was made of the numerous sore throats, but they were attributed to "late hours and dances." As only four plants in this group have medical service, and only one employs a physician, there has been little definite study of health problems within this industry.

The working hours are forty-nine and one-half or fifty in all but two establishments, as may be seen in Table XI. The working day is usually even-thirty to five or five-fifteen. Most of the women employed are either foreign-born or are of Hungarian, German, Austrian, or Polish parentage. Although most of them are between twenty and thirty years of age, they are of a mature type, appearing much older.

THE GARMENT TRADES

In the seven garment factories visited, 2,700 women are employed. Much of the work is power-machine operating, with the usual varieties of finishing work. The great problem of the garment trades is the regularization of employment, or elimination of seasonal variations in production. As a result of the attention which has been given to this problem, three

firms reported that they had work steadily throughout the year. One reported work for at least forty-eight weeks. Two large establishments operate through a fifty-week year, and of the remaining two weeks, one week is "layoff" and one may be vacation with pay. Another firm has a fifty-one-week year, and the whole factory closes for one week of vacation. As is shown in Table XI, weekly hours are forty-four or forty-three and three-quarters, in all but two shops, where they are forty-seven. One plant uses an allotment system—workers going home when the day's task is completed, and seldom working even the possible forty-four hours. Two firms work an eight and three-quarter-hour day five days a week, with a full holiday Saturday. Another firm, after trying the same plan, is strongly in favor of the eight-hour day and a half-holiday on Saturday.

In the ladies' garment trade the wages are usually set by the union wage scale agreement, under which the minimum is \$14 per week. Comparative starting rates may be found in Table XII.

Bohemians, Italians and Hungarians are the leading nationalities in each of several factories visited, with various Slav peoples also represented. In several factories there are more than one-third or one-half American born. Two factories will hire no one who does not speak English.

The use of routing systems and time study has made the modern garment factory a very different place from the old-style tailor shop.

CANDY FACTORIES.

Candy factories are as a rule relatively small establishments. The six visited had a total of 371 women employes. The demand for candy is seasonal, and there seems to be no way to regularize its manufacture, since it should be sold within a short time after it is made, unless stored under most favorable conditions. Two firms reported that they never laid off any help, as their forces automatically decreased in slack seasons when workers who left were not replaced. Most of the girls were American born, and as a group were young, although older women are used for sorting and other work since girls have become scarce. As little skill is required, except that natural to young fingers, there are many floaters who find in the busy seasons of the candy trade the brief employment which satisfies them. Such workers are apt to be careless about their work, and their persons, and require careful supervision, especially in the making of a food product. This supervision was generally found, but several establishments could well improve their standards of cleanliness as well as their equipment for the comfort of employes.

MISCELLANEOUS INDUSTRIAL ESTABLISHMENTS

Of those establishments listed as miscellaneous, some of the paper-box factories are small but quite progressive in policy.

Two tobacco factories revealed an interesting general situation. The tobacco industry of Cleveland finds itself on the decline largely because of

scarcity of skilled labor. In Cleveland no American girls and very few young foreign girls will work on cigars. As a result the workers are practically all foreign born and mostly foreign-speaking, and with the realization of their dwindling numbers have become very independent. One executive said that his plant is kept open fifty hours a week for the convenience of his employes, but none of them work so long, as they come and go at their pleasure. Several firms which began business in Cleveland have found it necessary to take most of their work elsewhere, and now have large tobacco factories in New York, Pennsylvania and Texas. These are said to be model factories as the workers speak English and appreciate the good working conditions provided. The firms apparently realize that the Cleveland factories could be made both more attractive and more healthful. Learning to make cigars requires several weeks, during which time most of the material handled is waste and cannot be reclaimed. The cost of teaching a new maker is said to be \$350, even at the starting rate of \$12 a week. When \$15 and \$16 a week is offered to an unskilled girl in other industries, there is little incentive for her to learn a difficult trade, even with the promise of high piece-work earnings later.

GENERAL OBSERVATIONS ON INDUSTRIAL ESTABLISHMENTS.

Hours of Work

Reference has already been made to the weekly hours in several trades. (Table XI.) In the course of the Survey, little overtime work was reported. Only ten firms admitted that they had any overtime for women, and that was said to be only occasional or optional. It seems probable that overtime is more frequent in clerical work than in industry.

While, to the knowledge of the Survey, regular rest periods are arranged for in only one factory, there are four establishments in which women are allowed fifteen minutes about nine o'clock in the morning for the purpose of eating part of their lunch. This is an interesting acceptance of the custom of many women who go to work with little or no breakfast, and consequently feel the need of food before the regular lunch hour. Another establishment has two five-minute rest periods which are optional, and consequently not extensively used. One firm had discontinued rest periods during the day but dismissed all employes twenty minutes before the accustomed closing hour, granting pay for the full day. Rest periods may be of additional value as a means of improving ventilation by open windows. Many workers object to fresh air if it must be admitted near them. Few people fail to appreciate a room full of fresh air replacing what has been vitiated, especially when there are present fumes or odors incident to an industrial process. It is probable that in many factories where the work is monotonous and exacting, much might be gained by instituting rest periods. Both before and after the introduction of such a measure, it is important that careful observation be made of the physical condition of workers as well as of production rates.

Earnings

It was hoped at first that figures might be received from payrolls showing actual earnings of a group of workers over a suitable period in order to obtain a fair conception of the relation of earnings to the cost of living and the opportunity for health. This was not found practicable, however. Wage rates are misleading, and as some are by the day and others by the hour or piece, comparison is difficult and often unfair. The starting rates reported have been tabulated in Table XII. Some establishments raise the rate at the end of the first week, some after two weeks or a month, and in many cases the rate stands until the piece-work earnings are higher, which may be in a few days or a matter of months. Estimated averages for the various establishments and their maximums are obviously so inaccurate in most cases that they have not been presented in this report. In several cases where averages of actual earnings have been made and analyzed, the results have been at variance with previous estimates—additional evidence of the futility of accepting approximate figures regarding actual earnings even from persons familiar with establishment pay-rolls.

Additional Benefits—Cafeteria

Practically all industrial establishments provide either a cafeteria or a lunch-room. The cafeteria may serve a full meal approximately at cost or may provide food to supplement the lunch brought by workers. Most plants arrange that coffee or other hot drinks may be secured free or at slight expense. In six plants the employees eat in work-rooms, in certain instances the company providing coffee. Several of these establishments have rooms which are called lunch-rooms, probably in the hope that they may thus fulfill the requirements of the law. The benefit of a change of environment together with good food at meal-time, is generally recognized, and many factories are planning better equipment in new buildings which they have in prospect.

Cooperative buying is another way of increasing the purchasing power of wages, which has been undertaken in several Cleveland factories with much success. Group life insurance carried by the company is an advantage offered by many firms. Only eight industrial establishments reported benefit associations or some form of sickness insurance for women employees. Several other firms have benefit associations but women are excluded from membership, the reasons not always being clear.

Recreation

In twenty-one establishments there was found some sort of group recreation instituted and supported by the employees, with or without the co-operation of employers. In certain establishments this is merely an informal banding into social clubs. In others there are carefully managed parties and entertainments for the employees and their families. A number of organizations have bowling clubs, baseball or basket-ball teams. Some firms have employed recreation leaders who direct setting-up exercises and

mes at noon. Where this is done, at the request or with the sympathy of the workers, excellent results have been obtained, but no person wishes to be coerced into play. The field of recreation offers an excellent opportunity for the development of employees' organizations upon a sound basis. The experience gained in deciding upon the form and direction of such activities is an excellent preparation for consideration of more serious issues which may confront employees in their industrial relations.

The value of group meetings is realized by many establishments as a result of their liberty loan rallies. Feelings of comradeship and friendship among employees are incentives to contentment in labor, and so become the modern equivalent of the spirit of craftsmanship. Group activities which foster these friendly relations and promote the feeling of solidarity among employees are to be encouraged.

Vacations

Many firms have a definite vacation policy. Four factories in the metal trades closed last year for two weeks during July or August. In one instance wages were paid for one week; in another plant, during a shut-down of four weeks, payment was made of two weeks' wages. Another firm offers one week of vacation with pay as a bonus to any employee who has not been absent during the year, except with a physician's certificate of illness. Several establishments reward old employees with vacations. One knitting mill has adopted the policy of one week of vacation with pay after one year of service. Another closes ten days during the year without pay. The garment factories generally give one week with pay after one year, although in one case days of paid vacation are reckoned by periods of service completed. Of the candy factories, two give one week with pay after one year, one gives ten days and another two weeks with pay. Other establishments recognize the desirability of vacations and permit leave of absence for the purpose.

Only two establishments were found in which Saturday was not at least a half holiday; two garment factories have no regular work on Saturday.

Supervision

There is no uniformity as to methods of employment in the various plants, but in many places the modern principle of having all applicants pass through one office has been adopted. This office is responsible for definitely hiring workers for all departments, and with the advice of foremen usually decides questions of adjustment, discipline and discharge.

For the purpose of the Survey an establishment has been considered as having centralized employment when the authority to hire or reject all applicants is vested in one person or office. (Table XIV.) In eighteen of the plants visited women were in charge of hiring women employees, and in some cases men also. The plants of Cleveland are recognizing more and more the value of having women in a supervisory capacity where women are employed.

The number and size of plants having supervisory women appear in Table XV which under this term includes: employment managers, welfare directors, and those who are in some measure responsible for conditions affecting the work of women in factories. Nurses have not been included unless when concerned primarily with such responsibilities rather than nursing. Foreladies have been omitted as their sphere is usually limited to direction of the performance of manufacturing operations. When there is no other woman in supervision, a forelady often successfully handles social problems and acts as intermediary between the girls and the management. As the duties of supervisory women are often not clearly defined, it has been necessary to make rather arbitrary classifications in some instances for the purpose of tabulation. In each of three establishments work of this nature is so extensive that there is a well-organized department staffed by a number of women, each with well-recognized duties. There is clearly an important place in industry for the woman who has by training adapted her common sense and personality to seeing fairly the problems of human relations and interpreting them in the everyday adjustments of factory life.

The question of health supervision for women includes a special problem discussed here rather than in connection with general health supervision. In almost every case where plant nurse, employment manager or other executive was asked about the policy in regard to the employment of pregnant women, the reply was that each case was decided upon its individual merits. There is need, however, of a certain well-defined standard of procedure, for if left to themselves, many women work longer than they should, and in their eagerness to conceal their condition may do themselves harm. Usually the executive in charge of personnel is eager to have any woman who is pregnant leave work as soon as or before her condition becomes noticeable. This is often desirable where numbers of girls and men are employed in the same departments, for comment cannot be avoided and is frequently unwholesome. Several cases were noted where special effort had been made to place favorably, pregnant women who were badly in need of money so that they might continue to work until about the seventh or eighth month under supervision of the factory nurse. It was generally believed that ordinarily a woman should not continue factory work after the sixth month. None of the executives interviewed wished women to return to work within six months or a year after childbirth, and except with foreign women it is seldom that any worker endeavors to return so soon. In plants where foreign women are employed without careful questioning or an effort to learn of home conditions, it may not infrequently happen that mothers of small children will be at work when they should be at home. Although it is not feasible to generalize for all processes and industries regarding the limitations which should be placed upon the employment of pregnant women, because of variations in the hazard of continued employment, thoughtful consideration should be given to the problems presented in individual cases, and in no event should pregnant women knowingly be permitted to work within two weeks before, or four weeks after childbirth.

PHYSICAL CONDITIONS OF WORK

Light, air, and to some extent sanitation vary largely with the age of the plant equipment. Many Cleveland firms are planning to build new factories with model installations and feel that they should not be judged on present facilities meanwhile. Cleanliness is more difficult to maintain in an old plant than in a new one, but it can always be achieved by dint of special application to the problem and is important for its moral effect as well as for physical comfort. Toilet facilities were usually found to be adequate and in compliance with the legal requirements, but in several cases were not entirely partitioned off from the main work-room, which is a very undesirable arrangement. Washing facilities varied greatly, but on the whole were adequate except for a somewhat too limited supply of hot water. Drinking water was usually provided by bubble fountains, or water coolers. Several common drinking cups were seen, as will always be the case when the workers must provide their own.

Facilities for the seating of workers were found to be of great variety, ranging from a barrel top or a box to the most modern steel chairs, adjustable for height of seat and back. The law requires that individual establishments "shall provide a suitable seat for the use of each female employe and shall permit the use of such seat when such female employes are not necessarily engaged in the active duties for which they are employed, and when the use thereof will not actually and necessarily interfere with the proper discharge of the duties of such employes, constructed where practicable with an automatic back support." In practice, while chairs are generally provided for at least occasional use, the phrase "interfere with the proper discharge of their duties" may be broadly interpreted to prevent the use of chairs at any operation, and has not resulted in the general realization that chairs can now be designed for use in connection with almost any type of work.

The law also provides that, "No female under the age of twenty-one years shall be engaged or permitted to work at an employment which compels her to remain standing constantly while on duty." Knitting, weaving and spinning are not considered standing work because the operator walks about her machine. As it is difficult to judge the ages of girls eighteen to twenty-one, this law is all but impossible of enforcement. A campaign for education concerning better seating and its use is needed for both employers and employes. It is true that employes often will not choose to sit at their work, and old employes frequently object to new types of chairs with backs. Operatives can usually be won over to acceptance of an appliance which is really to their advantage by a patient and persistent demonstration of its merits.

Lockers are another institution which often cause the employer to weary of well-doing, for keys are lost and many workers will not use locks when they are furnished. Twenty-five establishments reported that they had lockers, usually of steel, one for each person. Other firms use racks in a dressing-room. Only two cases were found where clothing was hanging in the work-room.

Couches were provided for women employes in thirty-two establishments. This might mean a single couch in a room crowded with wraps, or a comfortable bed in a silence-room or dispensary. Many plants have, in addition to a dispensary bed, a room with several couches to be used for rest when needed. The plant which has no cot available for an emergency is not properly equipped to care for women employes.

MERCANTILE ESTABLISHMENTS

In the seven mercantile establishments visited, 6,730 women are employed.

Department stores have uniform closing hours, giving them forty-eight hours per week, except a few that remain open an extra half-hour on Saturday. During July and August a number of the stores are closed all day either Saturday or Monday. The vacation policy varies slightly, but all stores grant a week with pay after a certain period of service, which may be three, six, nine, or twelve months, and usually two weeks with pay is given after a longer service.

Department stores have developed a special service for employes in their educational departments. It is helpful to a new employe to have the necessary information as to store policy and department relations presented in definite fashion. Through careful observation, the ability of the individual may be directed into the most fruitful channels. There is in many mercantile establishments opportunity for advancement, and effort is encouraged by the knowledge that many buyers and executives have worked their way up through the store. Classes in salesmanship give added zest to selling as well as increased earning in commissions.

Efficient employment is an important preliminary to the work of the educational department, and the health of employes as well should be carefully considered. Several of the stores are now giving attention to the development of adequate health departments.

Starting rates vary with the age and ability of the worker. For the stock, cashier and inspection departments, two stores have a minimum of \$10 per week, while others do not give less than \$12 or \$13. For selling on a commission basis, the usual minimum is \$15 per week.

Several stores have women elevator operators who are said to be more satisfactory than the men who are obtainable. Where doors are arranged to open easily, little physical effort is required, but adequate opportunity for rest should be provided to relieve the nervous strain of constant attention to an important duty, while at the same time treating passengers with courtesy and answering questions. Rest periods are provided in practically all establishments by the use of a relief operator. Except in one-way elevators standing is usually constant in busy hours, but suitable seats should be available for use upon occasion.

Women also operate elevators in several hotels and public buildings. This is another kind of work on which colored women are frequently employed. \$14 per week is the lowest of the wage rates reported for elevator operators.

PUBLIC-SERVICE ORGANIZATIONS

LAUNDRIES

It is unfortunate that conditions for workers in laundries at present seem to be in some ways poorer than in the past. The services of a woman supervisor have been given up in one place, use of lockers, cafeteria and recreation in another. Labor cost is fifty per cent of the cost of laundering, and as the public resents increased prices, it is difficult for laundries to raise their wage rates to a point of competition with factories. Consequently the scarcity of female labor is severely felt in laundries. Some plants were so short-handed that managers and executives had to take the places of absent workers. Porter service was most inadequate and often the laundry housekeeping was poorly done.

The attitude of laundry men toward their workers varied greatly. Some were indifferent to the objectionable features of the work. Others maintained that standing was not harmful, that high humidity was beneficial, and that marking soiled clothes was a particularly healthful occupation. In one laundry there was an effort made to seat all employes so far as possible. New machines, often designed so that the worker could be seated, were being installed beside old ones, showing the advances in this direction and suggesting further improvements that should follow if the comfort of workers is to receive the same consideration in laundries that it does in most factories. Ventilating devices were generally used, although often they were ineffective. It would seem that much of the steam could be kept from the general work-room by partitioning off the section used for washing, and mangles could also be installed in separate rooms, although there is no excuse for a noticeable escape of steam from mangles when excellent exhausts are available.

The nature of laundry work makes it particularly desirable that employes' wraps should not be left in the work-room, that separate lunch-rooms should be provided, that toilet and washing facilities should be adequate, but this was not always the case.

It is interesting that even the less progressive laundry men speak of the laundry as a type of public service, and feel a responsibility to serve their customers faithfully, especially when there is much general sickness as was the case this winter. One manager considered that the importance of getting the work done outweighed the importance of good working conditions for laundry workers so long as there was no violation of the law. Often the law's minimum is considered the only reasonable maximum.

The scarcity of labor has resulted in the use of colored girls in three of the commercial laundries visited, and three of the hotel laundries. Separate coat rooms, toilets and eating facilities were usually provided. The colored

workers were generally considered less efficient, and much slower to learn the work—which was given as the reason for their lower wage. Colored girls started at \$10 where white beginners received \$13. In two laundries white girls received \$14 for a starting rate, in another, \$12. The average for laundry workers seemed to be about \$17.

The variation of busy and slack days has been largely eliminated from laundries by daily collections of clothes from patrons. There is said to be no overtime for women. Two plants work fifty hours, one forty-nine, and two, forty-seven hours.

HOTELS

In spite of the inclusion of the word "hotel" in the Industrial Commission's definition of "shops and factories," there seems to be doubt as to whether hotels do come under the supervision of the Industrial Commission, especially since enforcement of "Laws Providing for Inspection and Licensing of Hotels and Restaurants" has recently been entrusted to the department of the State Fire Marshal, although with no mention of kinds of work or hours for employes. The hotel department heads were of the impression that some restrictions existed but were vague as to their nature.

Hotel and restaurant workers are said to be confirmed floaters. Some of the women live in hotel dormitories, with board in addition to their monthly wage; some live outside, receiving two meals daily besides a weekly wage; and others live outside and carry their own meals. Earnings depend in part upon tips and cannot be accurately estimated. They are often larger potentially than in reality, especially for chamber-maids. The stated sum paid for similar work in different places varied, and in general there seemed to be little opportunity for increases based on efficiency or length of service, although one hotel has group insurance and a bonus as incentives to continued employment.

The decentralization of responsibility in hotels rather surprises the inquirer who must go from department to department to learn of the various types of workers and the conditions of their employment. The hotel manager has two problems—serving the public and maintaining a staff of employes to render that service. As catering to the public is the fundamental purpose of a hotel, it receives most of the manager's attention, and the demands of the public are so varied that a great amount of detail is involved. The problems incident to maintaining a staff of employes are left to those in charge of the several departments, which are conducted quite independently of each other. The effectiveness of such an arrangement depends, of course, upon the efficiency of department heads. As stewards and hotel housekeepers are somewhat temperamental, and invariably complain of the unreasonableness of their employes who stay only a short time, it seems possible that the present method of hiring and dealing with employes in hotels might be replaced to advantage by an organized central employment service similar to that used in industries, in many of which the requirements for different types of employes are as varied as in hotels.

RESTAURANTS

Waitresses are one of the few groups of women strongly unionized in Cleveland. Their wage scale of \$12 to \$18 per week in addition to meals and tips, prevails in the city. They work eight hours for six days per week, but often the day is broken in two parts with the afternoon hours free. These cannot be well utilized, and the union is about to campaign for all straight watches of eight continuous hours. By using the shift system some managers have practically all of their waitresses working continuous hours.

While restaurants and cafeterias in many cases seem slow to provide facilities for the comfort of employes, some progressive managers have taken these matters into consideration, and are also planning centralized employment, employes' organizations, and medical service for workers.

PUBLIC UTILITIES

The difficulties of poor telephone service are well known to the public, but the reasons back of it require special study. Operators are scarce, special urging is often needed to induce girls to enter this field, and many of them stay for but a short time. The low wages paid have been one very evident reason. Changes have recently been effected in Cleveland, but comparison with most industrial work is still unfavorable. The nervous tension under which the work must be performed is trying to many temperaments. This has been recognized to a degree by the provision of a fifteen-minute rest period in each three and one-half or four hour period of duty. Whether this is sufficient for relaxation from such work is something that should be carefully studied and every effort made to preserve the routine so that no matter what the pressure of traffic may be, the rests need never be omitted. Rather than deny the nervous strain of telephone work, it would seem that companies might well devote themselves to special study of methods for lessening the strain on operators. The public should be better informed as to the conditions under which operators work, in order that they may cooperate with telephone companies to improve service by properly signalling operators, carefully giving numbers, and displaying a reasonable patience.

The telegraph companies employ several hundred girls as telegraph operators. Others are in the telephone department. All of this work requires a keen mind and a combination of speed and exactness in operation that would seem to deserve better pay than is generally given.

GENERAL DISCUSSION

NIGHT WORK

The difficulty of securing an adequate supply of female labor has already been discussed. One of the results of this labor scarcity has been to cause several manufacturers, under pressure of unfilled orders, to see in night work the simplest solution of their problem. There are women eager to

work at night, and many firms report that women are turned away from the night shift though they cannot be secured for work by day. These women have families of small children for which they must care during the day. At night their husbands come home and assume the responsibility of family care so that the mothers may go to the factory. Here they may work from five o'clock to ten, or more likely from three to eleven, five to twelve, or six to two, and in one plant from six to half past four in the morning.

It is hard to believe that after a day's housework and the care of small children a woman is in any condition to be a good factory operative, but many employers seem to feel that night work is very satisfactory. As most of the night shifts have begun in the past six months, the effect of a woman's holding two jobs has not become apparent in the quality of her work. The result will be sooner evident in her home, for even a sturdy woman of the European peasant type cannot long stand such double duty without impairing her physical condition, the first effect of which will be upon her children. A hard-working mother with insufficient sleep is apt to be irritable, and even if she is conscientious enough to feed and clothe her children properly, their tempers are apt to reflect her own. Of real home life there can be none when father and mother scarcely see each other, and the inculcation of American ideals under such circumstances is a barren hope.

The Survey has a record of 980 women who were working on night shifts in fifteen Cleveland factories on April 15th. Of these 652 were employed in the textile and knitting mills and 328 in the metal trades.

Aside from the effect upon home life, and the street dangers at night, the night work in the factory itself is not so pleasant as it is by day. Factory illumination generally is none too good. At night with only artificial lighting it is usually worse. Other parts of the building are dark, and there is a sense of the uncanny about being at work when naturally one should be asleep. In factories where there are cafeterias and dispensaries for the use of the day force, these facilities are seldom available at night. Often there is no definite pause for eating, even in a seven or eight-hour shift. There is almost never the same supervision at night that there is during the day, and where both men and women are employed there is even more reason for it.

Night work is possibly but a temporary measure. The experience of England during the war and, before that, the feeling that led six European countries to agree to prohibit night work for women, should make our people consider the institution carefully before we sanction its use even in an emergency threatening the life of the nation—and such an emergency does not now exist. So long as there is no hindrance to the establishment of night shifts for women, there will be temptation to meet orders by this means rather than by improved management, routing and planning of work. It would be well for Ohio to record on its statute books its opposition to the employment of women at night. At present there is not even an avenue for learning the full extent of night work, as there is no requirement for reporting night shifts to the Industrial Commission and no method for its control except through chance visits of state inspectors.

The telephone and telegraph companies employ a few women at night, and there is an occasional small restaurant with night waitresses. Girl ushers are used in several of the theatres and moving-picture houses, but in small numbers. Aside from factories the largest number of women who work at night are those who clean office buildings. They usually work eight hours, and it may be at any time of the night or early morning, although the shift from five to twelve o'clock is most popular, leaving, as it does, a little of the night for sleeping. The women are usually hired by the forelady in charge, and are in large proportion foreign. They frequently bring neighbors to work with them to avoid the journey home alone. These women speak their native languages, and enjoy the informality of the work, though there is no question about the fatigue in connection with scrubbing and carrying heavy pails of water, frequently with no elevator service. In April a night cleaning woman was killed while on the way to her home in a Cleveland suburb and robbed of her pay.

HOME WORK

A means of adding to the day's output utilized by a number of factories is home work. Parts of sweaters are frequently joined by a stitch done by hand, and use of factory space for this work is avoided in many cases by sending the work to the homes of women who have spent a few days in the factory learning the work. It is estimated that at least 225 women work on sweaters and other knit goods in their homes. Except for the delivery and collection of material by some of the firms, there is no overhead expense in connection with home work, so that it is difficult to understand why rates for this work should be so low.

A number of factories have established small branch factories, occasionally located in connection with a dwelling, but under the law considered workshops only when they are the assembly place for workers other than those living in such a dwelling. Between this type of workshop and the service rendered by women sewing by hand in their own homes, there is another type of industrial service performed by the women in whose homes a company has installed a power machine. While the Industrial Commission inspects the main factories and the smaller branch shops, it is not practicable for inspectors to maintain adequate supervision of the conditions under which work is performed in the homes of individual workers.

There is a variety of home work. An occasional garment factory sends out cuffs to be turned. The carding of snaps and fasteners employs about one hundred women. This work is done entirely in the homes, and the workers must carry supplies back and forth to the factory. The earnings seem very little for the time required, but the work is light and many women have probably been able to earn in this way who would otherwise not have been able to do so. Stringing of sales tags is another type of home work done mostly by children, some of whom object to the low rates of pay. In season there is also the home trimming of tailored hats, which are delivered by the case. A few women work on brushes at home.

While the advantages of home work for crippled or convalescent patients has given interest to its possibilities in special cases, the general increase of home work, due to current high prices on the one hand and the demands of employers for labor on the other, must be carefully watched. The repetition of such abuses of home work as were revealed by studies of conditions in New York should be avoided.

Not only in this country but abroad has it been observed that more unfavorable conditions for the children are created where their mothers do industrial work in their homes, than result from other forms of work undertaken by married women. Carmagnano, in *Pediatrics* (March, 1920, XXVIII, No. 5), believes that we should go so far as to provide legal measures to protect prospective and nursing mothers who are engaged in wage-earning or piece-work at home, as we protect them in factory work.

DAY NURSERIES

In almost every establishment visited, more married women were employed than ever before. Many of these were young women with few home responsibilities, for it was frequently said that in these days working girls return to the factory or store a few days after they are married. Many, however, are women with families who find even the fairly good wages of their husbands insufficient for the family needs, or those who wish to provide for the future by laying something aside now that wages are high, or others who are helping to pay for a home or sending money to suffering relatives in Europe.

Many complaints come from the schools that children of school age are kept at home to care for the younger members of the family, or in other cases that mothers are either leaving the children to run the streets or locking them in their houses while the mothers are at work. More than one child left in this way has been burned to death.

Whether mothers of small children should be permitted to work is a difficult social problem. They cannot be legislated into their homes, nor should they be encouraged to evade responsibilities by day-nursery facilities. On the other hand the children cannot be permitted to be neglected. Day nurseries have provided care for some children whose mothers are obliged to work. 337 such children were cared for by the Day Nursery and Free Kindergarten Association last year. The day nursery, however, is an expensive institution, and we have little information from which to judge its net social worth.

If working women were to be charged one dollar per day per child, which is the approximate cost of nursery care, probably few women would use day nurseries. Should the community then contribute to the support of the families of those mothers by supplying nursery care for a slight fee, encouraging the mothers to work outside their homes and leave their children for the group care of the nursery? If such is to be the case the community

must insist that this care be of the best and that preventive health measures for the young child be used to ward off later illnesses and defects so far as possible, in order that the eventual economic cost to the community may not be too high.

Mothers are working at the present time. The care that should be given to their children is a community health problem with economic and social aspects so important that each community should give careful study to its own situation.

MOTHERS' PENSIONS

The provision of mothers' pensions has been a partial approach to the same problem, but is applicable only in cases of widows who are mentally and morally sound and whose legal residence is established. . Even where mothers' pensions can be granted, they are most inadequate. \$15 per month for the first child and \$7 for each additional child, is the maximum permitted. This maximum is always granted in Cuyahoga County, but is so inadequate that in numbers of cases the pension must be supplemented by the Associated Charities.

In some counties, however, no pensions are given, and in others the amount is very small, so that great effort will be required to arouse sufficient public opinion through the state to secure legislative increase of the maximum.

The court takes the stand that no mother may receive a pension if she works more than three days a week, which means that a widow with four children is faced with the alternatives of receiving a pension of \$36 per month or of earning a living for the family.

RECOMMENDATIONS

It is the recommendation of the Survey—

That industrial and other establishments bring to the attention of employes the health value of suitable working clothing, with special regard for the advantages of proper footwear for women who are much upon their feet, and for the safety of women in machine trades.

That in establishments where there is routine physical examination of men, women employes be admitted to an examination of similar nature.

That uncertainty of the adequacy of piece-work earnings be obviated by a guaranteed minimum wage-rate when practicable.

That the industries of Cleveland devote special consideration to the elimination of hazards of accident and illness where women are employed.

That various industries endeavor to eliminate seasonal variations in employment through regularization of work.

That special effort be made to interest both employers and employes in the use of seating suitable for different operations, and that where possible chairs be adjustable for height of seat and back.

That every establishment employing women provide one or more couches for the use of such employes.

That the municipal department of health maintain careful supervision of laundries with special reference to the comfort and health of employes.

That the public be more adequately informed regarding the technical difficulties incident to maintenance of a telephone service, to the end that its cooperation be secured in a reduction of the hazard of nerve strain for telephone operators, and a consequent improvement of a service which at present is essentially dependent upon the high efficiency of a human factor.

That night work of women be prohibited by law, except in essential public utilities.

That greater publicity be given to provisions of the laws of the State of Ohio governing conditions of employment.

That the number of women inspectors of the Industrial Commission assigned to the Cleveland district be increased in order that the conditions attending the employment of women and children in individual establishments may be observed more frequently than at the yearly intervals at present prevailing.

INTEREST OF THE COMMUNITY

The hope of solution of the various problems in connection with the employment of women lies in the interest of the community. The Young Women's Christian Association has, through its Industrial Extension Department and more recently through the Industrial Women's Club, taken an active part in recreation for working girls, and has also attempted, by educational means, to prepare these girls to think out their problems for themselves.

The Vacation Savings Club has been effective in the encouragement of thrift among working people, especially women.

The Girls' City Club has been recently established by the League of Women Workers, with the aid of secretaries of the Vacation Savings Club, and affords a downtown social club for girls, with a variety of recreation and classes.

The local branch of the Consumers' League has taken an active interest in the various aspects of the work of women, and is cooperating with other agencies in an effort to learn actual conditions of work in relation to present and proposed legislation, and to learn the opinions of thinking working women concerning their own problems.

The State-City Free Employment Bureau is interested in the work of women from the practical point of view of placement. The worth of such a central agency for employment has been demonstrated in many places, and its usefulness grows as it is used.

Where working women play so important a part in the industrial life of a city as they do in Cleveland, there is reason to hope and believe that the people of the city will consider and protect their interests.

When a Feller Needs a Friend

By BRIGGS

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DECLARATION OF DEPENDENCE

Resolved That childhood is endowed with certain inherent and inalienable rights among which are freedom from toil for daily bread; the right to play and to dream - the right to the normal sleep of the night season; the right to an education that we may have equality of opportunity for developing all that there is in us of mind and heart" *McKelway*



Courtesy New York Tribune and The Cleveland Press

Children and Industry

By FLORENCE V. BALL

INTRODUCTORY

STUDY of children and industry is included in the report of the Hospital and Health Survey because the health of the large portion of the city's population who are going to be its industrial workers depends largely on what provisions are made for their welfare during the period when they are 15-18 years old. The years from 15-18 are the adolescent years, and children of this age face especial health problems which must have careful attention. Out of the children who go to work are developed the future industrial workers and citizens of the city. If only a few of the children in the community were going to work it might not be important from a health standpoint to consider their interests so carefully. But at 17 years of age many of the children of Cleveland are already at work, and many of them have been at work for two or three years previously. They are no longer under the direct care of school medical authorities. Neither are their especial needs studied and provided for in industrial medical service. Unless special provision is provided for children of these years, their passage into industry is unguarded and unguided, and irreparable damage may be done to their mental and physical well-being, which will have serious results both in their future and in that of the community.

How is the sound health of this group of children assured by consideration of their physical wants alone. Their problem is a psychological as well as a physiological one. The degree of adjustment between children and their first jobs, the success of their transition from school into industry, the amount of preparation which they have had for industrial life, are all factors of great power in determining their development from childhood into adulthood and maturity.

A study of children and industry from a health standpoint involves three general considerations: first, measures taken to protect the health of children upon entrance into industry, by the adoption of requisite health standards; second, regulation of their industrial careers until they reach maturity, which means a study of legal restrictions of children's work as well as a study of present conditions under which they work; and, third, the more direct but no less important relation between educational preparation, adjustment with the job and sound health.

Under what circumstances are children going to work? What measures have been taken to develop their bodies and make them physically fit to enter industrial life? What kind of work are children doing and what kind of chance does it offer them for future industrial competency? What happens to children at work who are not normal, mentally or physically? What education has prepared children for the shift from school to eight hours of work daily, at work quite different from the sort of activity which has char-

acterized their school life? What is going to be the effect of such a radical change on growing boys and girls, whose physical and mental instability at this time is marked?

Childhood naturally falls into several distinct periods, the prenatal period, infancy, the pre-school period, the school period and the adolescent period. Each of these periods is important in the welfare of children. To those interested in one particular stage of a child's development, that one may seem of paramount importance. Probably not until all periods are equally emphasized will children have a full chance for development. However, the successive needs of childhood may be viewed, no one will deny the need for careful instruction and guidance during the adolescent years. All of the care which has been given to children's health in earlier years will prove to have been futile if they are allowed to go free from guidance and protection in these later years before they are competent to take care of themselves. The physical and moral difficulties which approaching maturity thrusts on them, require for children assistance and advice and often medical care, in order to safeguard their health, as well as to complete the training and preparation which have been the work of society for the 14 or 15 preceding years.

These are the years of transition from supervised childhood to independent maturity. Opinion is divided as to the advisability of allowing children to go to work during this period. One point of view sees always the child in the developing boy and girl and desires for the child the maximum of care and protection. This protective care can go too far and, in extreme, smothers the springs of initiative and self-reliance needed in the man. The other point of view, more hard-headed, believes that participation in the work of the world cannot begin too soon for sturdy development. In its interest in independent character it tends to lose sight of the fact that too early work stunts a child's development and that a sound mind should be combined with a healthy body in order to realize its greatest powers. Another point of view, the commercial one, of the dollar value of child labor, should not be seriously considered. Obviously the industry of this country does not have to depend on the work of children for its income, although it is chiefly to combat the commercially-minded that it is necessary to make such strictly defined child-labor laws. Otherwise, it would be possible to make laws elastic, in order to meet more easily the individual needs of children.

It is our belief that the efforts made on behalf of children of adolescent years, regarding their passage from school to work, should be directed towards individual adjustments. In concern for the child, the man in the developing boy should not be overlooked, neither should the child be allowed to enter the adult's world of work too soon. There is great variation here in individual children. Some children mature much sooner than others and are ready sooner to make the transition from school to work. Methods must be developed by which allowance can be made for individual variation.

considerable antagonism is aroused towards the present regulation of children's work, by the hardship caused in individual cases. Even though hardship in individual cases is no argument for the abolition of restrictions on the age of children going to work, it should be possible to originate some methods making distinctions in individual cases, which will not be loopholes for scrupulous and destructive evasion of the laws designed to protect the health and best interests of children. Such distinctions can be worked out on a basis of the physical ability of the individual child, determined after careful medical and mental examinations. It is purposed to bring out the possibilities of such a method in the following sections.

This study is a survey of the present relation between children and industry in Cleveland, presenting information not so much comprehensive, as representative of the situation. The regulations limiting children's work which are at present in force are considered first, and next, the information which has been available regarding the number of children at work, both legally and illegally. Discussion, in some detail, of the kinds of work in which children are found employed follow. The questions of their health and measures taken to safeguard it are considered separately. There is included a brief report on the mentally subnormal children known to be at work. A section of the report considers the relation between industrial training, educational preparation, vocational guidance, and health and efficiency. The conclusions reached at the end of the study and the recommendations made are summarized in the last section.

The study was made during the spring of 1920. It had been the intention of the Consumers' League of Ohio to make some such research into health in the industrial field in Cleveland. Upon hearing the comprehensive plans contemplated for the Hospital and Health Survey, the Consumers' League decided to support the services of a special worker who would be under the direction of the Survey, rather than to carry on an independent research. An arrangement was effected for the present study, which has been made by a member of the staff of the Industrial Division of the Hospital and Health Survey, the subject of Children and Industry being especially appropriate to the long continued interest of the Consumers' League in work-children.

GAL PROVISIONS FOR CHILDREN 15 TO 18 GOING TO WORK

In order to understand the situation as it is in Cleveland for children of working age, a review of the existing legislation relating to children of this age is essential. Who are children? When does a boy become a man, and a girl a woman? The Ohio Child Labor Law says that a girl is an adult when she is 18, and may work the same hours and under the same circumstances as any woman, save that she cannot work at night until she is 21. According to the Child Labor Law a boy of 16 may work longer hours than an adult woman may work. After he is 18 this law considers him a man in every respect, able to work any number of hours, day or night, and under the same conditions as govern men's work.

Research has shown that boys mature more slowly than girls, but the Child Labor Law says that a boy may go to work a year earlier than a girl, and that he may have a year's less schooling than a girl.

On the other hand, the common law of the state does not consider a boy a man until he is 21, when he may for the first time exercise property rights and the right of franchise, and get a marriage license without permission of his parents or guardian.

Following is a summary of the essential provisions of the Child Labor Law of Ohio, and of other laws relating to children of 15 to 18 years going to work.

AGE REQUIREMENTS

Employment of boys under 15 and girls under 16 years of age is strictly forbidden. Age and schooling certificates are required for all boys under 16 and all girls under 18 years of age.

Boys under 16 and girls under 18 years of age may not legally be employed more than eight hours daily, 48 hours weekly, before 7 in the morning, not after 6 in the evening, nor more than six days in any week.

Boys under 18 years of age may not legally be employed more than 10 hours daily, 54 hours weekly, before 6 in the morning or after 10 at night, nor more than six days in any week.

Girls between 18 and 21 years of age may not legally be employed more than nine hours daily (except Saturday in mercantile establishments, when 10 hours is the limit), 50 hours weekly, before 6 in the morning and after 10 at night, nor more than six days in any week.

Certain occupations involving physical and moral hazard are prohibited for all women. Girls under 21 cannot work at employment involving constant standing. No boy or girl under 18 can be employed at extremely dangerous occupations to health and morals, eighteen such occupations being specified in the law. No boy under 15 years of age and no girl under 16 years of age can be employed at all, save in agricultural work or in domestic service. No boy 15 to 16 can be employed at dangerous machinery or where his health may be injured and his morals depraved, or at the tobacco trades. Thirty-two other occupations are prohibited to boys in the law.

EDUCATIONAL REQUIREMENTS

1. The age and schooling certificates required for all boys 15 to 16 years of age, and all girls 16 to 18 years of age must show that every boy has passed a sixth grade test, and that every girl has passed a seventh grade test. If upon examination and by school record a child proves to be below the normal in mental development and unable to pass this test, he may receive a school certificate at the discretion of the issuing officer.

2. Every boy 15 to 16 years of age must return to school if he ceases work and does not find other work. No provision is made requiring girls 13 to 18 to return to school if not at work.

HEALTH REQUIREMENTS

A certificate is required from the school physician or some properly qualified physician showing that a child is physically fit to be employed in any of the occupations permitted by law for a child between 15 and 16 years of age, provided that if the records of the school physician show such child to have been previously sound in health, no further physician's certificate need be required.

SPECIAL VACATION CERTIFICATE

Boys 15 to 16 years of age and girls 16 to 18 years of age may have vacation certificates to be employed in occupations not forbidden by law, even though they have not passed the required school grade, provided all other requirements for a certificate are complied with.

STREET TRADES

No provision is made in the Ohio State Law which covers street trades. There is a city ordinance, not enforced, regulating this kind of work. This will be further discussed in a section of the report on newsboys.

JUVENILE COURT

Provision is made through the Juvenile Court and probation system for dealing with delinquent young people of all ages who can be classed as juveniles. The offending street trader, or truant from school, here receives less severe handling than in regular law courts, and is dealt with by persuasion rather than by punishment.

ENFORCEMENT OF PRESENT LAWS

This comes under the School Attendance department of the city schools and the department of Factory Inspection of the State Industrial Commission. These two agencies cooperate to keep track of all children of the ages in question. The adequacy of their working force and their success in enforcing these regulations will be discussed at the end of the next section.

STATISTICS FOR CHILDREN IN INDUSTRY IN CLEVELAND, 1919

There are three sources of information from which to ascertain how many children there are in Cleveland, of what age and of what sex, how many of them are working and how many are in school.

1. The school census, taken every spring by the Census Bureau of the Board of Education, enumerates each child in the city from 6 to 20 years of age, whether he is in school, out of school or at work.

2. The Industrial Commission of Ohio obtains annually from all employers records of the occupations and wages of all boys and girls under 18 whom they employ.

3. The work certificate office, at the Board of Education, keeps on file the name, age and sex of every child who, after complying with certain requirements, secures from the office an age and schooling certificate, which entitles him to go to work.

It was possible to obtain information from these three sources for the same period of time, the year of 1919. The school census of May, 1919, was analyzed so as to obtain information for boys and girls separately, the records of the work certificate office for the school year, September, 1918, to June, 1919, were secured and, through the courtesy of the Industrial Commission, their statistics for 1919, which are not yet published, were obtained and analyzed.

The information collected in this way for the number of children at work is somewhat surprising to compare. Following is the summary of results. The full tables for this information may be found in the Appendix, Tables XVI. to XVIII.

TABLE XIX.

COMPARISON OF THREE TABLES FOR NUMBER OF CHILDREN AT WORK IN CLEVELAND IN 1919.

	Boys	Girls	Total
School Census, 15-18 years of age.....	9,068 (15-18)	6,778 (16-18)	15,846
Industrial Commission of Ohio, 15-18 years of age.....	2,957 (15-18)	2,072 (16-18)	5,029
Work Certificates Issued, 15-16, 16-18 years of age.....	1,444 (15-16)	2,057 (16-18)	3,501

Of the three records probably the records of the School Census more nearly approximate the truth as to the number of children actually in industry. Their figures were obtained in a house to house canvass of the whole city and were then checked up with the existing school records at the Census Bureau of the Board of Education, where a school child's card contains as well, a record of the whole family of children, whether of school age or not. The figures of the Industrial Commission were obtained from employers, and it may well be that they recorded only the certificated children whose permits were on file in their office, which would be boys 15 to 16 and girls 16 to 18 years of age. The boys 16 to 18 employed are only estimated in many cases. Not all employers keep age records of their employes. Furthermore, the Industrial Commission records are not complete, as a number of employers have not yet made their reports to the Commission for 1919. The work certificate office figures included only those children who went to work through the legal channels.

4. Illegal Child Labor and Law Enforcement.

Comparison of these sets of figures shows the great extent of unlicensed labor on the part of girls 16 to 18 years of age. Almost 5,000 girls are at work in Cleveland with no check on them in any way to see that the health and educational standards considered essential for them are maintained. In addition, these figures take no account of the extent of work among children who are under the legal age for employment. Reports have come in on all sides as to the number of under age children who are at work regularly, as well as at work part time after school and on Saturdays.

It has been exceedingly difficult to verify these reports, save for scattered individual cases. There is undoubtedly truth in the prevailing opinion. The school census bureau is freely used by a number of employers to verify the ages of young children applying for work. Records were kept by the school census bureau office for several weeks of such calls from employers, and disclosed actually at work, or applying for work, 168 boys and girls who were under the legal age for employment.

AGES AND NUMBER OF CHILDREN APPLYING FOR WORK

Age	Boys	Girls
11	1	----
12	5	----
13	25	13
14	34	41
15	1	48
—	—	—
Total,	66	102—168

42 of the boys and 73 of the girls were regularly at work, the remaining number, 23 boys and 28 girls, had applied for work. 22 employers were represented in this list. One department store was responsible for 60 of the violations, the majority of which were for girls, and one manufacturer of metal products was responsible for 18 violations, most of them for boys. The facility with which these figures were collected is an indication of the extent of illegal employment of children. In addition must be reckoned those children working after school and on Saturdays without permits.

Some of these children had been out of school for months, two or three as long as two years. One boy had been injured and his case brought into court. Another boy of 15 was working with a paper company without a permit. An accident brought this case to the notice of the school authorities. The boy's hand was crushed in a machine. His school record showed him to be defective, of a mental age of 9 years according to the test. If this boy had gone to work through the work permit office where his physical and

mental condition would have been determined, his employer would have been notified of his mental disability, and the boy protected from an accident hazard.

The Child Labor Law of Ohio is often cited for its excellence. If the law is not enforced, its excellence is without virtue.

One explanation of this illegal employment is to be found in the departments of School Attendance and of Factory Inspection. For it is their joint responsibility to see that the school and child labor regulations are enforced. Both these agencies work at a disadvantage. One truant officer must keep track of 10,000 children. Boston requires one attendance officer for every 6,000 children. Obviously, one officer cannot cover all of the cases of irregular attendance which occur among 10,000 children. As it is now, the truant officers devote only a small part of their time to following up children of working ages. If a child has come into the office and obtained a permit for a job, but has left that job, the permit then coming back to the office from the employer, he should return to school. This is not followed up. No one knows what becomes of the child. A list of such children was once started but the list grew so rapidly that it was impossible for the attendance officers to keep up with it, so the matter was dropped. This means that either the children are not working and are not in school, or they are working illegally without a permit.

There is no question of the efficiency of the present force. School principals and others interested have spoken most highly of the work of the attendance department, saying that the officers are untiring in their efforts and most cooperative. With such a small force something has to be neglected and the children of working age have been ready to take advantage of the light authority imposed on them.

This situation is true also for the State Department of Factory Inspection of the Industrial Commission. There are for the 88 counties of Ohio eight women visitors to see to the enforcement of the child labor law and others. The several counties surrounding and including Cleveland have the full services of two inspectors, who do splendid work, but who, obviously, could not be expected to be responsible for full enforcement of the law. Cleveland industry alone employs tens of thousands of women and young people and needs the supervision of several inspectors in order that industrial plants may be visited more than once annually.

Undoubtedly one source of illegal child labor is the tremendous labor shortage which has prevailed throughout the present year. This shortage was mentioned almost without exception by every employer visited. "We can't get help. Ordinarily our rule is never to employ anyone, boy or girl, under 18. But we have been forced to make exceptions to this rule because we can't get enough help otherwise."

The attitude of foreign parents is antagonistic also. They wish their children to go to work as soon as possible and will resort to any subterfuge

in order to evade the law. It should be pointed out that economic necessity is by no means always the explanation of their attitude. Foreigners have a different attitude toward their children from that of most Americans. Children represent so much potential earning power which must be utilized for the family income at the earliest possible time. The sense for property, owning a home, is strongly developed in European peasant people, and they will make every sacrifice of themselves and even of their children, in order to acquire a little land and a house, having no thought for the possible physical harm they are bringing on themselves. The strong constitution which is the inheritance of the European peasant does not always endure for his children. Life in an American city offers less opportunity for the development of a rugged physique able to withstand heavy toil as well as the high power, top-speed existence characteristic of city life.

Extension of school hygiene and general health education will in time eliminate this attitude on the part of parents towards their children. But meanwhile the laws designed to conserve the health and welfare of children are the only defense available to protect them from their own ignorance and the ignorance or short-sightedness of their parents or employers.

But one of the principal causes of so much illegal employment of children is the fact that the children know they "can get away with it." Otherwise there would never be so many applications for work from such young children. Inadequate supervision on the part of the truant officers on one hand and of the Factory Inspection Department on the other, leaves too many loopholes for children to slip through.

If it is impossible to enforce these laws with the present organization and personnel of the school and state departments, then their methods should be improved and their personnel increased to cover the city adequately. No city of the size and importance of Cleveland can afford to allow large numbers of its children of the ages of 12 to 16 years to enter industry, unrestricted and undirected, their physical fitness to perform the tasks which they pick out for themselves, in no way ascertained, nor their capacity to stand up under continued years of industrial life assured in any degree.

More supervision must be provided both by the school authorities and by the State Industrial Commission, in order to check up on this illegal employment. This is vital. No prerequisite health standards for children at work can be established and maintained until it is certain that every child going to work goes through the work permit office, where he is medically examined and must show physical fitness before he can obtain a permit for employment.

It is recommended that at least three more women inspectors be assigned to the Cleveland district by the State Industrial Commission and that the number of attendance officers in the School Attendance Department be increased from 13, the present number, to at least 20.

WHERE CHILDREN WORK

1. OCCUPATIONS EMPLOYING CHILDREN

Boys and girls are employed in greatest numbers in manufacturing, retail and wholesale trade, and in telephone and telegraph work. Table XX. in the Appendix shows the distribution of boys and girls in the various trades, as shown in the Industrial Commission's report. As before stated, the statistics of the Industrial Commission are not numerically complete, but they are sufficiently extensive to be representative of trades employing children in Cleveland. The information obtained through personal visits to 50 different establishments employing children in some numbers, corroborates in every instance the evidence of the Industrial Commission's figures.

The last published report of employment by the Industrial Commission of Ohio for Cleveland is for the year of 1915. A total of 3,299 children under 18 were employed in that year, as against 5,029 employed in 1919, showing an increase of about 1,800 in four years, or 35%. Table XXI. in the Appendix shows the distribution of children in the various trades for these two years, 1915 and 1919. There are several noteworthy changes. Telephone and telegraph work in 1919 used 463 girls under 18. In 1915, 35 girls were so employed. On the other hand, the employment of young girls has fallen off considerably in the manufacture of clothing, hosiery and knit goods, and woolen and worsted goods. The employment of boys has increased, mainly, in the manufacture of electrical machinery, foundry and machine shop products and sewing machines. Their employment has decreased in steel works and rolling mills. Both boys and girls are employed in greater numbers now in the retail and wholesale trade than in 1915.

The largest numbers of both boys and girls are employed in manufacturing, in round numbers 3,000 boys and 900 girls. The majority of these are wage earners, as distinguished from clerical workers. This is true of all employment for children. The classification of the Industrial Commission includes three groups of employes: clerical workers, wage earners and sales people. 23.7% of all children accounted for are clerical workers, 72.8% are wage earners and 3.5% are sales people.

Boys and girls are scattered throughout the manufacturing trades, being found in greatest numbers engaged in the manufacture of men's and women's clothing, hosiery and knit goods, the metal trades and printing and publishing. 39 manufacturing establishments were visited. In all, 50 establishments employing young people were visited and information collected regarding hours, wages, nature of work, opportunity for advancement, educational requirement, medical service and general conditions of work. The opinion of each employer was obtained as to the employment of junior help.

Medical service is described in detail in the first section of the Industrial Survey report, and conditions of work in the second section, therefore, no further discussion will be made of these two subjects in this report. In all places where girls are found at work women are employed as well, and conditions

of work are identical for both. This does not apply equally to boys. It must be remembered, as pointed out earlier in the report, that boys do not work under the same supervised conditions of work which the law insists upon for women and girls. Boys must use those toilet and dressing room facilities which are provided for the men, and must eat their lunch under the same circumstances that men do. This often means a cold lunch. While many factories provide a cafeteria where girls and women may obtain a hot lunch, not all of them provide the same service for boys and men.

A. Hours of Work

The law limits the hours of work of boys 15 to 16 and girls 16 to 18 years of age, to 8 daily and 48 weekly. So far as it was possible to ascertain the facts on this point, the law is observed. Employers who wish to use the services of children, find no difficulty in arranging their schedule of hours to accommodate an eight-hour shift for the children. Employers who can get along without the services of children state that they employ no one under 18, because of the difficulty of arranging a separate 8-hour shift.

B. Wages

Table XXII. in the Appendix shows the rates of wages paid to children in all occupations. 2,635 of 5,029 children listed by the Industrial Commission report receive from \$10 to \$15 weekly. 648 children receive less than \$10 weekly. Figures obtained by visits in the spring of 1920 run very slightly higher, 22 establishments pay between \$13 and \$15 weekly, 18 establishments pay \$15 or more weekly and 15 establishments pay less than \$13 weekly. In all cases where employers were questioned as to wages, the beginning rate has been quoted, as the character of the information for regular wage rates varies greatly. Some employers use hourly rates, others weekly, some estimate wages on a piece work basis, and others use a straight time rate. Even a payroll would not give exact figures, for the result of the labor scarcity of the past few months has been to make labor very independent, working only a few days in one place, or at one time. As one employer said when interviewed, "The girls come and go as they please. I don't dare say anything, or they put on their hats and leave. All I do is to carry the key."

Wage rates are slightly lower in retail and wholesale trades, and very definitely so in telephone and telegraph work, where the rate is \$10 to \$12 weekly. Manufacturing pays more, especially to boys. More boys receive from \$15 to \$21 per week than from \$10 to \$15 per week. Wages for boys are generally higher than for girls. This is true of all occupations. The present wages paid to boys in the various shops classed under metal trades work have been so high as to make boys a scarcity in all other kinds of work open to them. On the whole wage rates for children are high, due to the fact that many children are doing adults' work because of the labor shortage.

C. Nature of Work and Opportunity for Advancement

These vary in almost every trade for boys and girls. In the industrial field proper the manufacture of men's and women's clothing offers to girls good opportunity to learn a trade and advance to higher positions. Boys in this trade run errands, or work in the shipping room. Their greatest chance for a job with some future is to become an apprentice to a cutter. In the six establishments visited, girls learn the trade in a school maintained in the factory or from instructors, and require from two to eight weeks in which to learn. They may start in at once on power machine operating or begin by examining or packing the finished product. One instructor states that young girls are not strong enough to do machine work and so are started in on hand work. The sewing trades offer a very good opportunity to girls. Girls should be carefully watched, however, against undue eyestrain. One factory has the eyes of girls regularly examined by an oculist, and insists on glasses being obtained if prescribed. The physical condition of each girl should be determined before she is allowed to begin power machine operating. This could be done by the company physician or by the examining physician at the office where she obtains her permit to work, and a recommendation put on her permit as to her physical ability to essay heavy work.

The Manufacture of Confectionery

This is a seasonal industry and attracts girls of the floater type who never stay very long anywhere, or who wish to work only occasionally and do not wish to work where they have to spend time learning a trade. Chocolate dipping is the only operation for women in this trade requiring any skill, and very few of the younger girls are found at chocolate dipping. The employment of boys in this trade is negligible.

The Manufacture of Hosiery and Knit Goods

This industry employs boys and girls in about equal numbers. In most instances it is no longer a seasonal industry. The work is easy to learn and instruction is given by other workers or by foreladies. Some of the boys and girls work on knitting machines, but most of them handle the finished product in the stock room, doing inspecting, folding and packing. In addition, boys are employed to run errands. There is little or no opportunity for advancement in this kind of work. An increase in wages is the most that can be hoped for. Considerable standing is necessary. The law states that no girl under 21 shall be employed at an occupation requiring her to stand constantly, and that seats must be provided for every girl and woman employed. Seats are usually provided and sometimes made use of. The average girl needs instruction in health education. Some standing is necessary in all occupations, but many employes stand constantly, even though their work does not require it. On the other hand, many tasks are done standing which could be done seated, if employers would devote a little thought to the matter. Numerous machines are now operated from seats, which formerly required a standing position. It is very essential to the health of young girls

at they be not subjected to the strain of continued standing. No small action of the medical service in industrial plants should be the instruction of employees, especially the younger ones, in the application of common sense to their daily living, in such matters as alternate sitting and standing at work, changing of posture while at work, the wearing of practical working clothes which will give freedom of movement and the maximum of comfort, the necessity for nourishing diet, plenty of sleep, fresh air, and other related subjects.

The Metal Trades

Of the 23 metal trades establishments visited, nine employed boys and a few girls. 294 boys and 9 girls under 18 were found at work. The girls were for the most part engaged in packing and sorting parts and in making small pasteboard boxes. In no case was their work difficult and in every case they were seated at benches. For boys the metal trades offer exceptionally good opportunities for learning a skilled trade. In eight of the nine plants they were found working in machine shops under the supervision of skilled workmen, making good pay and having every chance to apply themselves and get ahead. Very few of these boys, however, were under 16 years of age. Employers almost universally stated that it was their rule to employ no boys under 16. "They are a nuisance." Much of the machinery involves so great an accident hazard for such young boys, and there is nothing much they can do but run errands. Even boys from 16 to 18 years of age are looked upon with disfavor. Whatever the explanation may be, it is true that the dissatisfaction of employers with boys of this age is general. "They are hard to get and no good." A number of firms were visited which had been known to employ boys of this age, but no longer do so, having made a strict rule to employ no one under 18, boys or girls, because they had proved to be of much unsatisfactory help. As a group, the metal trades seem to be above the average in plant organization for the welfare of employees. Medical service is provided, equipment is good, hot food may be obtained at noon, and some recreation is provided. This is well worth noting because of the large number of boys it affects. 1,119 of the 2,090 boys employed in industry proper in Cleveland are in the metal trades.

In the plants visited 115 of the boys were employed as apprentices. This means that they were systematically learning a machinist's trade and in addition were occupied part of each week in study and class work, either at East Technical High School or in classes conducted in the plant. The superiority of this method of inducting boys into industry cannot be emphasized too strongly. It will be discussed in more detail in a later section.

There are only a few shops in Cleveland where a modern or in fact any system of apprenticeship is now made use of. A number of employers stated that they have plans for it in mind, but that with the present scarcity of boys, it is not possible to establish such a system now. In the two plants where an apprenticeship system is well established, great satisfaction was expressed as to the results obtained.

Printing and Publishing

This is a trade which is largely unionized in all its branches, even in the binderies, which make use of girls and women. For girls, in practically all work done by them outside of the binderies, there is no job with a future. Feeding presses is the commonest sort of a job. This is easy work, is safe, is done sitting, but is very monotonous. Employers frankly say that it is blind alley work and it is very difficult to hold girls at it any length of time.

Boys have always the chance to learn the printer's trade or to become pressmen. This work they may learn through the apprenticeship system which is directed by union rules. Union rules require four years' time spent as an apprentice before a boy is able to qualify as a skilled worker. Non-union shops claim that the work can be learned in a year and a half. Union rules require, in the case of pressmen, that there can be only one apprentice to every five pressmen in a shop. The employer in this trade states that there should be an allowance of one apprentice to every three pressmen in a shop. As the union rule works out, it is difficult for a boy to become an apprentice, as there are few openings. No relation is made between school and shop. No part of the boy's time is spent in class work.

Working conditions in the printing trades are fair. There are definite lead hazards in most branches of the trade, and as yet union organization has not recognized this hazard in relation to young boys who are especially susceptible to lead poisoning. No provisions are made to protect boys from a lead hazard. In European countries boys are not permitted to work in occupations which expose them to lead fumes or dust. Boys in American shops have been found doing the dustiest kind of work, cleaning and brushing linotype machines and gathering up lead scraps. Under section 13007-4 of the State Child Labor Law the State Board of Health has power to forbid the employment of boys under 18 at any process injurious to their health. This authority should be used to exclude boys from employment on those processes in the printing trades involving a lead hazard.

Retail and Wholesale Trade

Seven large department stores were visited. In this group 105 boys and 266 girls under 18 are at work. They are apparently employed in about equal numbers. Here again opportunity differs for boys and girls. Boys are employed in the stock room as messengers and as "jumpers" and wagon boys in the delivery department. Many boys who are still in school engage in this kind of work after school and on Saturdays. This is not difficult work for an active boy. It is done in good surroundings, for the most part. The modern department store, of which there are a number in Cleveland, serves hot meals and uses care and thought in arranging for the welfare of its employes. The chief objections to this kind of work for boys are that it does not get anywhere in giving training for a trade, and the law regulating the hours of work for young boys is often disregarded in the delivery service. It is common experience to have a package thrust in a house door late in the evening by a small boy, especially on Saturdays and in a holiday season.

Girls are welcomed into department store organization very readily. One employer says, "We cannot get along without our junior help." Another says, "We give careful attention to the young girls coming to work for us, for in them we look for our future material for salesmanship." At least four of the stores visited have an educational department, where girls receive a certain amount of class instruction as training for store work. Girls under 18 rarely start in as saleswomen. They are employed as branch cashiers, box wrappers and in inspecting merchandise. In time they may graduate into salesmanship work, where there is greater opportunity both in salary and for responsible positions. The New York State Factory Investigating Commission considers there is a definite health hazard for young girls in much of department store work. "The nervous tension of the work of parcel wrappers and of floor cashiers has been found to be of a serious character."

Telephone and Telegraph Work

Telephone Work.

About 400 girls under 18 are employed in telephone work. This is a marked increase over the number in 1915, when only 35 girls were listed for both telephone and telegraph work. The telephone companies have in the past endeavored to limit employment to girls over 18, but their inability to get sufficient operators, with the resulting unsatisfactory telephone service, has led them to seek younger girls.

No report of the trade of telephone operating can be made without careful consideration of the nature of the work. Telephone officials stoutly insist that there is no nervous strain in operating, that it is pleasant and healthful work. Some of them base this statement on their own experience of years in the service. And in appearance these women justify their contention. However, in comparison with other types of work open to girls there is considerable difference. Girls work in "tricks" of four hours; having during that time one 15-minute relief period, when they can leave the switchboard.

This 15-minute relief period is a regular part of the routine. However, when a supervisor is short of workers it is not infrequently impossible for her to arrange this relief period. The rest of the four-hour period operators must sit steadily in one position before the switchboard. There is no opportunity for them to move around and change their physical position, as is the case in most other occupations. During this period girls are sitting with their arms stretched out before them or reaching upward, and their eyes must be continually on the switchboard. White and colored lights are continually winking on this board in front of them. In addition, operators must listen and talk against the constant buzz and noise created by a large number of people talking in one room, even though the noise from talking has been scientifically reduced to a minimum by the construction of the switchboard mechanism. While the noise in the operating room of all exchanges does not compare with the roar in the average machine shop, the difficulty is that in a telephone exchange almost continuous conversation is necessary with subscribers, requiring close and sustained attention from

operators. It is often difficult for a subscriber to retain his poise and calm during a fifteen minute period of telephone communication. How much more exacting it is to expect the same of an operator for four hours at a time.

Telephone work is learned in a training school, requiring attendance from two weeks upwards, part of which time is spent in the class room, and part at the switchboard. A salary is paid to the student while attending school. The same excellent lunch and rest room facilities are provided for students as for regular operators.

There is good opportunity for advancement to supervisory positions for a girl who likes telephone work and will continue in it. There is also considerable opportunity in the commercial field for private branch exchange operators. This kind of work pays well and often leads to other opportunities.

The average duration of service of telephone workers is not long. Statistics for Cleveland are not available on this point, beyond the statement of officials that their labor turnover is high. However, in the report on telephone work just made public by the New York State Industrial Commission, it is stated that of every three applicants registered for telephone training one does not finish training, one stays less than one year, and one stays more than one year. As a girl is an expense to the company until she has been employed one year, this means that the loss on operators is high. The telephone companies make every effort to cut down the high labor turnover by means of careful selection of operators, improved conditions of work and well developed welfare features. That the rapidly shifting working force may be due to the exacting nature of telephone operating seems not to have been so carefully considered. While medical service is provided for all plants of the companies, it is not adequate. The facilities of the medical department should be expanded to give operators a periodical as well as an initial physical examination, and complete medical records should be maintained, in order to obtain reliable information as to the degree of nervous strain experienced, and its effect on the health and efficiency of operators.

That there is a distinct health hazard in telephone work for younger girls seems undoubted. Up to the age of 18 years a girl's nervous organism is none too stable in any case, and it is questionable whether it should be subjected to the peculiar nervous strain of telephone operating in an urban community. The Ohio Child Labor Law prohibits to girls under 18 certain occupations dangerous to their health. It is recommended that a careful study be made of the effects on the health of young girls of this kind of work, and that if the results of this study warrant it, telephone operating be included in the occupations forbidden to girls under 18 years of age. As the telephone companies, in Cleveland as well as elsewhere, are coming to rely more and more on the services of younger girls, this is a question which should have immediate attention.

Telegraph Work.

As organized in Cleveland at the present time telegraph work has few places for girls under 18 years of age. The only work open to them is messenger work in the operating room. When a girl becomes 18 years old, however, she may go the company school and take a several weeks' course in telegraph operating. There is in this work a trade with some, if not a considerable future, and it involves no great health hazard.

Telegraph business makes use of boys in large numbers, 140 being employed as messengers by the two companies in Cleveland. Their work is easily learned, familiarity with the city being about the only requirement. There is no real opportunity for advancement in messenger work. A boy might better make his initial contact with the industrial and commercial world through a job holding out some inducement to buckle down and learn a trade. Messenger work, like newspaper selling, can be done and is successfully in one company, by older men. Employers like the energy and hustle native to youth, but it is short-sighted to allow that energy to be dissipated in a job without a real future.

D. Educational Requirement

Throughout the trades there is no educational requirement, save in the case of apprentice schools, when a boy must have graduated from the 8th grade. The last group described, including telephone and telegraph work, endeavors to maintain an 8th grade requirement. Their need for workers does not always allow them to do so. Possibly the most striking comment which can be made upon the various tasks at which girls under 18 and boys under 16 are employed is that the mentally subnormal children found at work in the city almost without exception are engaged at the same tasks, upon which normal children are working. Apparently the tasks are so simple that it is possible for subnormal children to engage in them without difficulty. The work is easily learned. Few of the jobs upon which the younger people are now employed require any great skill. From the standpoint of learning a trade this is not always objectionable. For example, in department store work there are a variety of tasks for girls to become familiar with, no one of which requires any great skill for proficiency, but all contributing to a knowledge which is essential to the higher jobs opening up to girls later on in the profession. The same may be said of metal trades for boys. There is considerable preliminary work upon which a boy's time may be spent, which provides general training for machine shop work and which does not waste his time.

From the standpoint of learning a trade, it is objectionable, however, to employ a boy or girl at work which utilizes youthful energy without yielding any training for future competency. The messenger work at which so many boys and some girls are employed in factories merely uses young legs because they are quicker than old ones, and so long as a man has at his disposal a pair of young legs it is easier to use them than to think up some means of

getting along without them. The use of messenger and office boys is a holdover from the older, more inefficient methods of doing business when work was conducted without thought for the most economical organization of time and energy. In the labor shortage in Cleveland of the past spring, the job that was the hardest hit was that of office boy. It was the universal complaint that it was impossible to get an office boy, even when a largely increased salary was offered as inducement. When opportunity was open for other work, boys chose the job of office boy and messenger last of all.

E. Comments of Employers

Opinion differed somewhat as to the merits of boys and girls under 18. It was almost universally stated that the boy of certificate age, that is, 15 to 16, would be better off in school. Many employers thought all children under 18 were better off in school, but so long as it was possible to do so, they employed a few. A number stated that they intended to eliminate the younger help as fast as possible.

F. Conclusions

The trend of the comments of employers strengthens the conclusions reached after the study of children's employment, a brief summary of which is recorded in the observations made on the various occupations. These conclusions are first, that the presence of boys of 15 to 16 years of age in industry is not necessary and can and should be eliminated; and, second, that there must be more conscious direction into the industrial field of boys and girls 16 to 18. The blind way in which the average boy or girl gets his or her first job is one reason for their employment at casual work, learned today and forgotten tomorrow. Their work is unsatisfactory and they are unreliable because there is nothing about their jobs to wake them up to real effort. Their minds are elsewhere.

Blind alley jobs in children's employment have been recognized for some time, and while not approved have been more or less condoned as unavoidable. They are not unavoidable. The labor of children 10 to 14 years of age was once thought unavoidable and was condoned. It has been proved conclusively that such labor is not necessary. So long as children are allowed to drift about, as fancy dictates, from job to job, instability and unsatisfactory work will result. Methods should be worked out in connection with the certification of children for work, which will provide that a child's first job is selected with some care and thought. This selection should be determined by the inclination of the child as much as possible, but also by his physical and mental capacity, ascertained through the careful medical examination made.

Unless especially pointed out in the description of the particular occupation there is comparatively little health hazard for a normally developed child, 16 years of age, in the trades where he is found employed in Cleveland, provided the legal regulations regarding hours and conditions of work are

complied with. There is quite a definite health hazard, however, in the effect on a child of irregular and promiscuous jobs, or in work uninteresting in itself and holding no promise of a real vocation in the future. The opinion of the director of boys' employment of the Public Employment Bureau in Cleveland is of weight on this point. After several years' experience she states her conclusions as follows: "The freshness, interest and alertness of the boy seeking his first job are so much valued by employers that school boys seeking vacation work are readily hired, even though their services are temporary. Contrasting strongly with the keen forcefulness of these school boys are the sullenness and stolid disinterestedness of the boys who keep changing jobs. Employers have corroborated our observations that boys are, as a rule, less valuable at the end of one or two years' work than they were when they began their first job. The chief reason for this unfortunate but common state is that boys leave school anxious to earn money, and, because they have not thought about a trade or future advancement, they take the first thing they happen to find. This is usually a 'blind-alley' job which pays from the start a reasonably high wage. The boy is at first delighted and applies himself so well that his earnings, if on a piece-work basis, become higher. If he wishes to speed up and work overtime, he can earn more. Because of his high weekly earnings at this rate, if he has a chance on another job at a higher rate, he leaves to try that. After a year or so of this, the results noticed in him are definite physical deterioration, such as nervousness, enervation, drooped shoulders, sluggish bodily movements, and slow mental reactions. Boys who have shown great promise when their applications were first presented, but who have insisted on this kind of work, have been a real disappointment when it is evident what their work has cost them. The long, confining hours of industry, unless the boy is buoyed up by the stimulation of a future finished apprenticeship and a worthy goal of achievement, and the loss of nervous energy in high speed jobs stamp upon the face, figure and health of that boy the price he has had to pay."

It is largely from a health consideration that more care is urged in the selection of jobs for children. Children have a right to work and in many cases the effect on them of employment is highly beneficial. But they are not adults and some supervision of their activities in industry is legitimate. Children are not wholly free agents in the selection of their school studies, and there is no reason why they should be in the selection of work until they have reached the age of maturity. Boys and girls of 16 have not reached the age of maturity. Left to their own direction they think of their health last, if they think of it at all. If they are directed into work for which they are physically and mentally qualified, the health hazard involved in allowing young children to work daily will be greatly diminished.

2. STREET TRADES

There is no provision in the Ohio State Child Labor Law relating to newsboys, and other street traders. There is a Cleveland city ordinance, not enforced, containing these provisions:

No boy under 10 and no girl under 18 years of age may work at all on the city streets.

No boy under 14 years of age may work on the city streets before 5:30 in the morning and after 8 at night.

No boy 10 years of age and over may work on the city streets, without a permit issued to him in writing by the mayor of Cleveland, or by his authorized representative. The permit shall state that the boy is mentally and physically fit to perform this work. After a permit is secured by a boy he shall receive a badge, which he must wear while at work. This permit may be revoked if the provisions of this ordinance are violated. Trades which come under this ordinance are, selling of papers, periodicals, gum, pencils, candy, perfume and other commodities, in a public place.

The Consumers' League of Ohio has campaigned for some time to secure the enforcement of this ordinance. Through interviews with public officials they secured the following promises:

- (a) Mayor Davis said that he would authorize someone at the Board of Education to issue permits and badges.
- (b) Superintendent Spaulding and Mr. Jones have promised that the Board of Education would issue the permits and badges, provided money could be raised to pay for the latter.
- (c) Chief of Police Smith has promised that he would instruct his squad in the enforcement of this ordinance. Judge Addams will cooperate.

The Consumers' League states that the ordinance is not now enforced because—

1. The newspapers do not wish regulation, claiming they are making efforts to take care of the trade from within.
2. There is no money in the city license department to pay for badges (estimated cost \$300.)
3. There is no money to pay special officers to be detailed to this particular work.

Boys and a few girls enter these trades as young as six and remain in them throughout the years while they are in school. The majority of them sell newspapers. Anyone who will take the trouble to observe, may judge for himself as to the extent that newspapers are sold on the downtown streets and busy outlying street corners by small boys.

Nor is it necessary to point out in any detail the undesirable nature of this work for children. Common sense alone will indicate the inadvisability of allowing children from six years of age up to spend time on the downtown

streets, in an atmosphere of great confusion and excitement, getting home after dark, going to bed late and having irregular and badly chosen meals. The fact that a progressive city like Cleveland will continue to allow its children to hazard their health and safety in this way is puzzling, although it may be an illustration of the extremes to which American sentiment for business independence will go. There is a very real appeal made by the small hustler who thrusts an evening paper at the passerby, which has been felt by everyone, but it requires only a little thought to realize that this appeal is not justified by the price which the child must pay in the end.

For the purpose of securing some specific information as to the extent and general character of the newsboy trade, a census was taken in a downtown school adjoining the business district, of the boys in that school who were selling newspapers or other articles on the streets. There are about 800 pupils in this school, 400 of whom are boys. One hundred records were secured from boys and 10 from girls by a canvass made from room to room. A summary of these records is found in Tables XXIII., A and B, in the Appendix. As many as 20 boys under 10 years of age were found who sold papers. Six of these youngsters sold papers until after 8 at night. Fourteen of them earned less than 50 cents a day. Twelve of them were classed by their teachers as not having good health, and eleven of them were classed as having inferior mental capacity.

According to the ratings of age and grade in use by the public schools, 59 of the 100 boys who sold papers were retarded in school one, two and three years. Eight additional boys were in a special "opportunity" class which was not graded. 17 out of the 100 boys were in open air classes. 34 of the 100 boys had a poor health record and 16 a fair health record, making 50% of the boys whose health is only fair or poor. All of the boys sold papers on Saturdays, either for the same afternoon and evening period or all day.

While it would not be justifiable to conclude that the physical and mental condition of these boys is due wholly to the fact that they sell newspapers, as there are probably other contributing factors, such as home conditions, ignorance of foreign-born parents, and others, the fact should be emphasized that almost two-thirds of these boys are in no condition, physically or mentally to justify their work of selling papers in their spare time after school and on Saturdays.

Seventeen of the boys were found in open air classes. This means that they had been diagnosed as suffering from some degree of poor nutrition, and so were placed in special rooms where a maximum of fresh air is provided and the children are given the benefit of extra food. The teachers report that the children improve greatly in health when attending these open air classes. A number of stories of the newsboys found in these open air rooms are of interest.

Arthur, age 9, in the third grade, sells papers every afternoon until 8 o'clock and Saturday the same time. Saturday morning he sells boxes which he picks up around the market. He makes about 50 cents a day.

He is only a fairly good student. As open air class boys rank, his health is fair.

Joe, age 10, in the fourth grade, delivers papers from 4:30 until 7 in the morning. He sells papers after school until 6. On Saturday his hours are from 4:30 A. M. to 7 A. M. and from 9:30 A. M. to 6 P. M. He makes about 75 cents a day. Although he was regular in attendance at school, his physical condition is poor. He was a failure last year in school, and at present applies himself only fairly well.

John, age 11, in the fifth grade, sells papers after school until 6. He is badly undernourished, and is only a fair scholar. He expects to get a job and work this summer.

Peter, age 11, in the fifth grade, sells papers after school until 6 o'clock. He makes a dollar a day. He has been selling papers for a year, is markedly nervous and jumpy. He has been a truant from school and has to report to the truant office. He is bright, but he is not able to apply himself, according to his teacher.

Martin, age 10, in the fourth grade, works after school until 6 o'clock, making 40 cents a day. He was sick and lying on a cot when interviewed. He is only a fair student.

Amelio, age 11, in the sixth grade, sells papers until 7 every night and on Saturday from 10 in the morning until 8 at night. He has been selling papers five years. He is regular in his attendance at school, but not very strong, and is very nervous. His health has improved greatly since going into the fresh air class.

Mike, age 7, in the second grade, sells papers until 7 at night, making 19 cents a day. He goes to the office with his brother for the papers. He is frail looking. His teacher reports that he is not at all well.

Frank, age 8, in the third grade, sells papers from 7 in the morning until school time, and after school until 8. He makes 95 cents a day, including tips. His health seems fair. He is very nervous, talks very fast and stutters. He is in a special class for stutterers, and tries very hard to overcome it.

Billy, age 8, in the second grade, sells papers until 10 at night. It takes him a half hour to get home from the downtown district where he works. The school nurse and doctor cannot find anything wrong with him, but they have not been able to understand his sleepiness. The teacher states that it has been a struggle all the year to keep him going. "He is so lifeless, bright enough and gets along well enough in his studies, but has no energy."

Sam, age 11, in the fifth grade, delivers papers from 5 to 7:30 in the morning and sells after school until 6. He makes a dollar a day. He has been

selling papers two years. He is small, nervous and of a high strung type. He is bright, a good student, and has been a truant, but not at the present time.

Joe, age 11, in the fifth grade, sells papers until 7 o'clock. Then every night and Sunday he watches tickets in a show until 9 o'clock. He gets 75 cents a week for this. He is undersized and not strong. He is intelligent and a good student.

Joe, age 12, in the fifth grade, sells papers after school until 7, making 40 cents. He has been selling papers for five years. On Saturday, from 8 in the morning until 4 in the afternoon, he sells boxes which he picks up around the market, making about \$1.50. On Sunday he shines shoes from 8 to 10 in the morning, making 50 cents. He gives the money to his mother. She usually gives him a dime. He is very anaemic and not in good health. His scholarship record is poor. He does not apply himself, and his teacher considers that he has dull mentality.

These cases, selected at random, show very clearly the kind of life which newsboys lead. While the amount of money they make varies in many cases, it is not worth the time spent making it. It should be noted that in every case where boys are working later than 6 o'clock their physical condition shows the effect of their late hours and irregular meals.

Their hours out of school should be occupied in a manner which will not drain their vitality further. The excitement of street life with its over stimulation of young nerves and energies requires sound health and strength to withstand its strain. Boys should not be allowed to engage in newspaper selling and other street trading unless they can show a clean bill of health and are up in their school studies. Boys like and enjoy this kind of work, in most cases. If they are allowed to engage in it only when they can comply with a certain standard of scholarship and physical ability, the desire to become a newsboy could be utilized as the necessary incentive to master school studies and develop health habits.

It is recommended that the city ordinance regulating street trades be enforced, pending amendment of the ordinance or inclusion of these trades in the state law. Permits to boys to engage in this work and badges to be worn by them while at work, should be issued through the work certificate office of the Board of Education, where each boy will receive a medical examination showing him to be physically fit for this occupation before he can obtain a permit.

Early morning paper delivery should also be regulated by issuance of certificates based on physical fitness for this work.

Although regulation of this trade does not come under the state school law, the enforcement of the existing city ordinance directly affects pupils throughout their school life and unless some effort is made to keep watch of

the children in these trades, their unguarded pursuit of them will break down the work of the Board of Education in the medical and truancy departments.

It is logical that children in the school system engaging in these trades should do so only under the direction of the Board of Education, so that the work of the medical and truancy departments may not be nullified by the extra-school activities of these children.

3. AGRICULTURAL WORK AND DOMESTIC SERVICE

Neither of these groups of work is included in the list of occupations employing children which come under the regulation of the State Child Labor Law. The number of children who are employed at these kinds of work cannot even be guessed at, as no record is kept of them in any place. Undoubtedly some of the 6,778 girls 16 to 18 years of age, listed by the school census as working, are employed in domestic service.

Agricultural work for children under 18 does not affect any number of children in Cleveland except in one situation, which is, however, of considerable importance. This is the case of children who leave Cleveland in the early spring and remain until the late fall to work in agricultural fields either in Ohio or elsewhere. The children are recruited by agents who are paid by the farmer who employs them so much a head for children recruited. These agents obtain individual children without their parents, or whole families, and transport them to the locality where they are to work.

Principals of schools in districts where there is an industrial population report that every spring about six weeks or two months before the close of school, or in April sometimes, there is an exodus of children and families from the district. One school principal reported that 20 families and some boys had gone from her district, taking about 100 children altogether, the majority of whom were her school pupils. They went to work in the beet fields near Flint, Michigan, and were signed up by agents who came into the district and went directly to the homes of the families. In this school district there are Italians, Slavs and Hungarian gypsies. The Italians do not undertake this kind of work, but many Slavs and most of the Hungarian gypsies go.

This happens every spring. These people will return about one month after school begins. The children miss from two to three months of school and considerable retardation in school is the result.

All of the children from 6 years of age upward work in the beet fields. According to the statement of this school principal even the little tots bring home as much as \$150.00 for the season's work. The living conditions are primitive. The people live in shacks and very bad sanitary conditions prevail. The National Child Labor Committee has made considerable research into this form of work and has found very undesirable situations in every state visited.

So far as is known practically no boys are employed in domestic service. As before stated, it is impossible to make any estimate of the number of girls under 18 years of age so employed. In the canvass made of one school to obtain information as to the numbers of children working after school hours at selling papers, it was learned incidentally that quite a number of girls 14 years of age and under were doing housework after school and on Saturdays.

Experts in industrial diseases state that housework contains more health hazards than are found in any other industry. There are no statistics available to sustain this statement, but it would be wise to make a study of this occupation and accumulate more accurate information regarding it. It is questionable whether housework has any beneficial effects on the health of very young girls who engage in it.

Both of these occupations should have age limitations and some supervision of conditions of work, particularly agricultural work. There should be an age limit of at least 12 for these occupations and a limitation of the hours of work, similar to the limitations in hours for other occupations. A health certificate should be required of every child. Regulation of conditions of work may involve some difficulties needing the cooperation of other agencies, but examinations for a health certificate can be conducted in the same manner as for other occupations by the existing machinery, without great difficulty. By limiting the age and the hours of work of children engaging in these occupations and by requiring of them a certificate of physical fitness for this kind of work, their health will be better safeguarded.

HEALTH OF CHILDREN AT WORK

1. MEDICAL EXAMINATION OF CHILDREN FOR WORK PERMITS

“Little has been done up to the present time in the United States to prevent children from going into work for which they are physically unfit, and practically no study has been made of the effects of early labor on the growth of the body. Many children who begin work between the ages of 14 and 18 are the children of least resistance in the community. They are in general the children of the poor, and in consequence are likely to be the ill-nourished, the undersized and the anaemic. Already handicapped, their growing bodies can offer no resistance to the exacting demands of industry on muscles and nerves. During these maturing years they are peculiarly liable to injury from overstrain and peculiarly sensitive to all sorts of industrial hazards.

“A great deal of the work done by children is, moreover, totally unfit for them. It often involves too much sitting, or too much standing, the carrying of weights beyond the child's strength, the over exercising of one set of muscles at the expense of another, and, in certain occupations, the loss of sleep. Foreign investigations have shown that the sickness rate among juvenile laborers is alarming, especially during the second year of working life when the injurious effects of early labor upon already undeveloped bodies have had time to make themselves felt.

"A 'physical minimum' for children entering employment was provided in the standards adopted by the Children's Bureau Conferences held in Washington and other large cities in May and June, 1919. This minimum proposed that 'A child shall not be allowed to go to work until he has had a physical examination by a public school physician or other medical officer especially appointed for that purpose by the agency charged with the enforcement of the law, and has been found to be of normal development for a child of his age and physically fit for the work at which he is to be employed.' It proposed also that 'There shall be an annual physical examination of all working children who are under 18 years of age.' (For the complete text of the standards, see pages 3, 4, 5 of Conferences Series 2, Bureau Publication No. 62 of Children's Bureau of the U. S. Dept. of Labor.)

"But what constitutes 'normal development' for boys and girls of different ages, and what indicates that a child is 'physically fit' for the employment which he is about to enter? Only through exact observation and measurements can it be demonstrated that a child is unfit for certain kinds of work, or that too early and too exacting labor is endangering his physical development. The standards to be applied constitute a vitally important part of the problem of child labor."

The above paragraphs are quoted from the statement of the Federal Children's Bureau made at the time of the appointment of its Committee on Health Standards for Children Entering Industry. It states very clearly the necessity for special care for children of these years who are going to work.

In the descriptions of the various occupations in which children were found employed in Cleveland an effort has been made to point out the particular health hazard, if any, present in each. There is, however, some health hazard in any kind of employment for growing boys and girls, unless their work is carefully supervised. Their physical and nervous organisms are not yet stabilized. They have less endurance, and they are more susceptible to fatigue and bodily strain. Postural strain is most likely to be overlooked unless a child receives some medical supervision after his initial examination for a certificate. The bony structure of a child is quite flexible. Children are peculiarly susceptible to deformities if subjected to unusual and prolonged strain on one set of muscles, the use of which is especially required by the job at which they are employed.

In the future, probably industry itself will exercise more supervision over the work engaged in by children in its employ. The attitude of many employers at the present time is exceedingly intelligent and considerate, in so far as they have knowledge of the physical needs of children 15 to 18 years old. As the medical service in industrial plants develops there will be better facilities for close observation of children at work, and of the effect on them of different kinds of work. It will be possible to make finer adjustments between children and the tasks they perform which will definitely affect their health and efficiency.

Pending the time when industrial medical service can share this responsibility, the health of children in industry must be guarded by the public department which has the responsibility of examining the mental and physical abilities of children applying for working certificates.

In Cleveland this work is done in connection with the Department of Medical Inspection in Schools of the Board of Education. The present requirement in the Ohio School Law of a health certificate for every child going to work has been only superficially observed until the past year. The present director of the work has been at work since last June. Records have been in use only since September, 1919. Therefore, there are no data available for a longer period than one school year.

Children are examined carefully as to eyesight, hearing, teeth, throat, lungs and heart, and are looked over for bodily defects, fallen arches, evidences of malnutrition. All children are measured and weighed. They are questioned on their previous health history and for any diseases from which they have suffered, such as epilepsy, rheumatism, contagious diseases, influenza, etc. This is quite a casual inquiry of the whole group being examined. On the occasion when the procedure was observed 15 girls were being examined, and as the room is small there was some confusion. The girls took a personal interest in each individual examined, crowding around her until ordered back.

The information obtained is recorded on each child's health record and filed. Separate files are arranged for records of children with serious physical defects, of children requiring correction of defects, and of children who are to be re-examined at a later period. The last named usually have conditional certificates. The medical officer spends about three hours daily in the office and a daily report is made up which is kept in the school medical inspection office. These records show the total number of boys and girls examined, the number considered defective and those who were relatively sound, the different defects found and the number of corrections effected during the 8 months from September to May.

In the 8 months from September, 1919 to May, 1920, there were examined 2,348 children, 1,001 boys and 1,347 girls. 492 of the boys and 19 of the girls, or 1,111 of the children, had one or more physical defects. The complete figures from these records will be found in Tables XXIV. and XXV. in the Appendix.

The defects from which children were suffering in largest numbers were carious teeth, defective vision and poor nutrition. 623 children had defective teeth, of which number 367 were later reported corrected. 199 children were handicapped by defective vision, of which number 109 were later reported as having corrections made. 403 children were suffering from some degree of poor nutrition. There was no record of treatment recommended or received in these cases. 27 children were diagnosed as suspicious or positive tubercular cases.

The records of the large number of children suffering from decayed teeth, in many cases so bad that repair was impossible, from defective vision and from poor nutrition, indicate that the work of school medical inspection is not adequate. Children should not be allowed to reach the ages of 15 and 16 with such uncared-for teeth that many must be extracted. Poor nutrition may be due to a number of causes. More study of the subject of nutrition is necessary. The school medical department is already conducting experiments and classes in nutrition which it is hoped will lead to the diminution of the undernourishment which handicaps so many school children. In some cities a minimum standard of nutrition is set, determined according to the height, weight and age of the child, as requisite for a health certificate.

It is not within the functions of this department to do other than examine children and prescribe treatment for physical defects discovered. No medical or dental work is done. The child is sent back to his own physician for treatment. In case it is understood that the parents of the child are unable to pay for such care, the child is referred to one of the public dispensaries.

In order to obtain prompt action on the part of parents in having the prescribed corrections made, certificates are usually refused until the work has been done or until the child can show evidence that the corrections are under way. A conditional certificate valid for a short period of time is often given to a child who is under medical or dental treatment for some remediable defect. At the end of the period for which the conditional certificate has been given the child must return to the office and show evidence that the defect has been corrected before he can obtain a permanent certificate.

While this department has been organized less than a year, it is already fairly well established, and its work is proving its value. The officers are much interested in its development and the outlook is promising for an organization having a splendid influence on the health problems of children going to work. The department needs to be considerably expanded and its working force increased. Health standards for children going into industry should be formulated, patterned after those soon to be issued by the Federal Children's Bureau Committee already mentioned. A summary of the committee's preliminary report on standards is included at the end of this section. One of the functions of the department still to be developed should be sufficient contact with the industrial field to assure familiarity with the jobs in which children are employed, in order that the examining physicians may be able to decide intelligently as to the desirability of different kinds of work for the various children examined.

It is to be regretted that there are no health records available for a longer period of time than one year. It is not possible to learn from the records of one year only, the physical effects of employment on children, data which it is important to collect before conclusive statements can be made as to the desirability of this or that occupation for children. A prominent activity of this department should be the study of the various occupations which children enter, and the accumulation of evidence of the development of children after a period of months and years in these occupations. This information

can only be obtained by means of periodic medical examinations of children after employment has begun. The Ohio law relating to health certificates for work permits should be amended to require such periodic medical examinations. The law should be amended also to assure a medical examination in every case before a certificate is issued for a specific job. The pledge of the employer required in the present law should be amended to specify the exact nature of the work a child is to do, as otherwise a child may be transferred to work, other than that for which he received his work certificate, which may be injurious to his health. The amendments to the present law can be made as in the suggested form of the law, which follows:

2. SUGGESTED CONTENT OF OHIO LAW RE HEALTH CERTIFICATE FOR CHILD APPLYING FOR A WORK CERTIFICATE.

Section 7764-1 (4) Health Certificate. A certificate from the school physician, or if there be none, from the board of health, and if there be no board of health within the school district in question, from a licensed physician appointed by the board of education, showing after a thorough medical examination that the child is physically fit to be employed at the specific occupation for which the child makes application for a permit, such occupation to be one not prohibited by law for a child under 18 years of age.

Periodical examination of children who have been granted one health certificate shall be provided for by limiting the period of time for which certificates may be issued to two periods of six months each and one period of one year successively. A thorough medical examination showing the child to be physically fit for the employment in which he is to engage or is engaged shall be necessary in every case, before a certificate may be issued. Certificates may be granted for shorter periods of time than six months or one year, successively, if the physical condition of the child warrants more frequent examination, or if the child is allowed to work while receiving medical treatment for correction of remediable physical defects.

A new certificate shall be required upon every change of employment.

An adequate force of qualified physicians and others shall be provided for the work of examination and follow-up which may be necessary.

(Pledge of Employer) (1) A pledge or promise signed by the employer or by an authorized manager or superintendent, specifying the exact nature of the work which the child is required or permitted to do, the number of hours per day during which the child is to be regularly employed, and the name and address of the employer, in which pledge or promise the employer agrees to employ the child in accordance with the provisions of this act, and to return to the superintendent of schools or to the person authorized by him to issue such certificates, the age, schooling and health certificate of the child within two days from the date of the child's withdrawal or dismissal from the employer, giving the reasons for such withdrawal or dismissal.

3. SUBNORMAL CHILDREN IN INDUSTRY

There are at present no means of ascertaining the mental capacities of all children wishing to go to work, other than the school record, which is too brief to furnish any information except the fact that the child has completed a specific school grade. Completion of the sixth grade is required of all boys and of the seventh grade of all girls. If it is decided that the mental capacity of a child is such that he cannot pass the required grade, that child may obtain a special permit to go to work, other requirements being complied with. School children who are suspected of being mentally deficient are tested by the examiner of subnormal children of the Department of Medical Inspection of the Board of Education. Only a small number of the subnormal children in the city are so examined. Such of those known deficient children as apply at the attendance department for a certificate to work, have on their school record the fact of their deficiency, and that fact is taken into consideration when the children are medically examined for a certificate. This information is invaluable in directing a child into the sort of work for which he is most suited because of his mental disability. A 15 year old boy went into the attendance department one day to obtain a permit to drive a truck for a construction company. He proved to be physically sound and during the time while he was being examined seemed normal. His school record showed that he was mentally deficient, having tested to a mental age of eight. The doctor promptly refused to grant him a permit for that job, as it did not seem wise to allow a boy of eight year old mentality to drive a truck about the city streets.

There has been some discussion in the department as to the advisability of putting the statement of a child's mental deficiency on his school record, which goes to the work certificate office. Some officials felt that it was unfair to handicap the child in this way in finding employment. It is true that such a statement may not give a fair representation of the child's capacity. The circumstances under which mental tests are given to a child may be such as to upset a not too well balanced mentality; that is, to a child in any degree uncertain of himself, it would be very upsetting to have to answer questions by strange people in the presence of his teacher and others who are strangers or of whom he is afraid. In such cases no child would give a very good account of his faculties. Furthermore, intelligence tests are still in the field of research, and not yet completely developed. It should not be so difficult to ascertain the mental capacity of an adult whose faculties have become somewhat crystallized, but it is questionable whether one group of tests as now used can set a value on the faculties of a growing child some of whose abilities are still latent. One employer, who has considerable sympathy for handicapped children, stated that he took three certificate boys who were mentally subnormal and put them to work in the machine shop. That was a year or so ago. Two of the boys were still there this spring, and one of them, his employer states, is making one of the best machinists in the shop and is an assistant foreman. It was his opinion that the tests which classed these boys as subnormal were too narrow in their scope, giving no indication of the fact that their ability might be entirely along a mechanical line.

Whatever the facts may be as to the adequacy of the tests as now given, their usefulness is undeniable and those in charge of them are exerting earnest effort to make the tests used complete, reliable and in step with the latest findings in this field of research. While more efficient tests may be worked out, those already in use are of great assistance in indicating, even if crudely, differences in mental capacities.

Any knowledge of a deficiency in mentality of a child wishing to go to work should be communicated to his employer, as a protection both to the child and to the employer. In the visits to industrial establishments made during the course of this study, employers were questioned as to this point and the answer was invariably the same. "This information should be on the certificate of the child. It is of great assistance to us in deciding just what the child shall do, and it protects us both from the chance of an accident."

A study was made of all the records of the subnormal children applying at the work certificate office for working papers from September, 1919, to March, 1920. Of the 2,323 health records on file in the office for that period 148 were those of children whose mentality was deficient. According to these records 6.4% of all children having work permits are subnormal. This does not represent the total number. It represents only those children whose subnormality had been ascertained while they were in school. In close connection with the medical examination for work certificates there should be facilities for determining more accurately the mental capacities of all children wishing to go to work. The data available from such examinations will be an exceedingly valuable contribution to the studies of employment for children which are now being made.

A careful study was made of the 148 records of children of subnormal mentality. The work which these children were doing was analyzed, their physical defects tabulated and mental age recorded. In Table XXVI. in the Appendix the information thus obtained is shown in detail.

There was more deficiency among the boys than among the girls, as the subnormal boys were 8.6% of the total number of boys who had obtained work certificates and the subnormal girls were 4.8% of the total number of girls.

Twenty-seven of the boys and twenty-two of the girls had no physical defects. Poor nutrition and bad teeth were the chief sources of trouble for both boys and girls. In many cases the two went together. While the number of cases of defective vision was not great, it should be noted that what is described as mental deficiency in children is not infrequently retarded mental development due to bad vision. 13 girls and 8 boys who had tested subnormal in school came to the work certificate office with defects in eyesight which should have been corrected before, in view of the fact that the children were thought to be defective and had proved to be so upon being tested.

Not all of the children who had applied for work certificates were at work. Between a third and a half of the certificates had been returned to the office,

showing that the children had left their original jobs. As the office has not followed up such cases, it is not known whether these children got other jobs and are working illegally or whether they are staying out of school at home.

The jobs for which the children had certificates could be classified in three general groups, machine work, hand work and errand work. Almost half of the boys were doing errand work as messengers, wagon boys, etc. The machine work was of a simple sort, such as is done in a large knitting mill. Under hand work was grouped a large number of jobs in sorting and packing products, all of which require practically no skill and involve the repetition many times of one simple operation. Employers seem to have no objection to this group of workers. In many cases the work is very little different from that required of normal children. As before stated, the kind of work which many young children are doing is exceedingly simple, is easily learned and involves little or no mental effort.

A question which requires study and which must be settled regarding such children, is whether or not they should continue in special schools where they can receive more training, or whether they should be more carefully inducted into industry where they can be under the stabilizing influence of regular work.

Opinion differs on this point. Some teachers of backward children regret very much that they leave before 16 years of age, saying that it takes several years of special work to get any results with the children. Others believe that they are better off at work than in school and that the law requiring their attendance in school should be more flexible than it is, in order that such individuals may get to work as soon as possible. Such children can receive their industrial training to better advantage in a shop than they can in a special class in school, where only meagre industrial equipment is possible.

In Cincinnati a special committee supervises the industrial careers of all such children. In Baltimore unusual boys are taken from school and put to work under the direction of a department having this special responsibility. The effect of carefully directed work on the character development of these boys has been noteworthy. An experiment of this kind is well worth trying. Too little is known of the possibilities which lie in the right kind of work for backward and unusual children. It is suggested that a special arrangement should be made in the work certificate offices whereby children of this group will be carefully studied and directed into employment and followed up after they are at work.

4. SUMMARY OF STANDARDS OF NORMAL DEVELOPMENT AND PHYSICAL FITNESS FOR WORKING CHILDREN

(Tentative report of the committee appointed by the U. S. Children's Bureau to formulate standards for the use of physicians in examining children entering employment and children at work.)

A. GENERAL RECOMMENDATIONS

1. Age Minimum for Entrance into Industry.

Should be not less than 16 years. It is important to protect a child from the physical and nervous strains of industry because of his general instability during the pubescent period.

2. Physical Minimum for Entrance into Industry.

No child under 18 years should be permitted to go to work who is not normally developed for his age, of sound health and physically fit for the work at which he is to be employed.

3. Physical Examinations for Children Entering Industry.

A thorough medical examination for entrance into industry should be required and must show that a child is physically fit for industry. Before the examination is made the child must bring a promise of employment from his prospective employer stating the specific occupation in which he is to be employed.

4. Re-examinations for Children Changing Occupations.

With each change of employer another examination should be made before the child is again permitted to work, likewise when a child is transferred in the same place to work differing in its physical demands and hazards from that for which a permit is issued.

5. Periodical Re-examinations for All Working Children.

Yearly medical examinations should be required of all children at work up to the age of 18 years, or more frequently if judged desirable. These examinations shall take place either in the certificate issuing office or in the place where the child is employed.

6. Need of study by local administrative and medical officers of occupations in which children are employed and of their effect upon health.

Occupations employing children should be especially studied by the examining physician, who should also be required to familiarize himself with conditions of employment and the various health hazards of industry.

7. Need of authoritative scientific investigation.

Considerable further study of the effects of different kinds of work upon the physique of the adolescent child is necessary, and especially with reference to:

- (a) Comparison of the rate of growth of children employed in different occupations with that of children not in industry.
- (b) Comparison of morbidity among children employed in different occupations with that of children not in industry.

- (c) Comparison of mortality among children employed in different occupations with that of children not in industry.
- (d) Fatigue in children employed in different occupations and industries.
- (e) Effect of employment in specific occupations at different stages of physiological development upon the growth and health of (1) normal children, and (2) children with certain physical defects.
- (f) Effect of employment in specific occupations upon the special functions and organs of adolescent girls and young women.
- (g) Types of work desirable for: (1) children with some mental defect, and (2) children who are suffering from some physical handicap.

Considerable material for these studies could be obtained from public school medical records and records of examinations made for work certificates. All such records should be standardized so as to be statistically comparable.

8. *Certain tentative minimum standards obtainable from results of scientific research already available.*

Although further study is necessary, there are sufficient data already on hand to justify the recommendation now of certain tentative minimum standards, which will materially safeguard the welfare of children entering industry while still immature.

B. *MINIMUM STANDARDS OF PHYSICAL FITNESS FOR CHILDREN ENTERING AND WORKING IN INDUSTRY*

1. *Standards of normal development.*

- (a) Certificates should be refused to children who do not come up to the following minimum standards of height and weight for specified ages, based on the most reliable present-day experience.

Age	Weight (in clothing)	Height
14	80 lbs.	58 inches
15	85 lbs.	58 inches
16	90 lbs.	59 inches

Exceptions may be made if other circumstances in the child's case, such as racial characteristics, warrant it.

- (b) Certificates should be refused to children who do not show certain unmistakable signs of adolescence.

2. *Standards of health and physical fitness for specific employment.*

- (a) Certificates should be refused permanently to all children who have certain specified defects. All such children should be referred to the appropriate agency for whatever assistance may be necessary.

- (b) Certificates should be refused to all children pending correction of all serious remediable defects. Such children should be referred to the appropriate medical agency for the necessary medical treatment.
- (c) All children who, for any reason, show a tendency to weakness or disease of any organ should be excluded from occupations which tend to aggravate that tendency.

C. POINTS TO BE COVERED AND METHODS TO BE EMPLOYED IN PHYSICAL EXAMINATIONS

1. Items for Inquiry.

(a) First examination should include a record of sex, race and nationality, age, intended employer (name and address), intended occupation and industry, school grade completed, family history of father, mother, brothers and sisters, previous illness and physical examination. The physical examination should include the following:

Height	Maturity	Nasopharynx
Weight	Skin	Glands
Physical condition	Eyes	Chest, heart, lungs
Nutrition	Ears	Abdomen
Anaemia	Mouth	Nervous system

Summary of defects, as correctable and non-correctable.

Certificate should be (a) recommended after first examination, or (b) refused, either permanently or temporarily, pending correction of specified defect, or (c) recommended after re-examination (that is, after correction of defect).

(b) In re-examinations the same points should be covered as in the first examination, and any changes noted in detail.

2. Record card and instructions for use of examining physician.

The use of a uniform record card is recommended in order that uniformity may be obtained in administration and in statistical analysis. Such a record form is included in the report of the committee. (These standards in full may be obtained from the Federal Children's Bureau, Washington, D. C., upon application.)

EDUCATION'S RESPONSIBILITY

More educational preparation for the transition from school to industry is necessary. Upon the training provided in public education depends in a great measure the success with which children are guided out of the school period of semi-dependence into the industrial period of greater freedom and final independence when they must rely wholly on their own efforts.

It is generally agreed that education's prime function is that of training for citizenship in the complete sense. That this education must contain more elements which will connect it with industrial life is also generally agreed. When 75% of the children leave school shortly before the completion of the elementary grades to go to work, it is necessary to plan a course of education which will supply the essentials within these grades. Industrial experts believe that vocational training should not be included in elementary education except in the broadest sense, that schools supported by general taxation should not be expected to supply specific training for particular jobs, that being the responsibility of industry. But the schools are not alive to their responsibility in getting children safely to work. Their influence should not cease as soon as the child goes through the school door. Authorities agree that partial supervision of the child should continue until the child is 18. His public school education should continue at least as long as that in some form.

The problem of incorporating into the school program a sufficient amount of preparation for industrial life, of the right sort, is one of the most pressing and fundamental of the many questions which educators must face. Of the various experiments already being tried out none has as yet proved itself of sufficient value to justify its general use. The problem has many angles and requires considerable study and experimentation. The endeavor of the National Association of Corporation Schools to gather data on the subject and to develop experimentation in industrial training as well as in general education is a noteworthy instance of the many earnest efforts being made to throw light on a perplexing but interesting problem, interesting because it is of recent growth and is an index of the changing attitude of society towards industry. It has taken a long time for general thought to recognize that cultural education may include knowledge of the industrial world as well as of the world of letters and of science.

This problem cannot be solved easily. It is not within the province of a health survey to make specific recommendations as to how it shall be done, whether by more vocational training of a general nature in the school curriculum, whether trade apprenticeship in industry, or by the extension of the establishment of continuation schools. The Smith-Hughes Act, passed by the United States Congress in 1917, has been a great incentive to the organization of some sort of vocational education in all of the states of the country. The local Board of Education or the Ohio state educational authorities should give this subject careful consideration in the near future and make more adequate provision for industrial training in the school program than exists at the present time.

One element of training for industrial life which should be mentioned here is that of health education. Education for physical development and health maintenance cannot begin too soon. Knowledge of the elements of hygiene and sanitation should be thoroughly taught. For the child entering industry it is important that he shall know not only the value of physical and nervous energy and its conservation, but also the particular health hazards which he will encounter in industry. Trained to take into account

health considerations just as he takes into account wages and hours of work, in determining the relative merits of possible jobs he will have learned a valuable lesson, and a most useful one. As reported in the section on Child Health Work (Part III.) there is no systematic instruction in hygiene and sanitation offered to the school children of Cleveland at present. A study of the subject brings out the necessity for such instruction for children who are going into the greater freedom of the industrial world, while they are still children. Every possible measure which can be taken to teach them to take care of themselves contributes towards their development into healthy adults. The Board of Education should provide at once for systematic and thorough health instruction throughout the grammar grades.

JUNIOR VOCATION DEPARTMENTS

Nor is there space in the scope of a health survey to do more than indicate the problem of actual industrial placement of children going to work at an early age. Sufficient industrial training before leaving school and careful selection of the first jobs in industry are both factors of influence in assuring the establishment of sound health in children of this formative age. Not only must a child be adequately prepared and physically qualified to go into industry; he must also get into the right place where his individual abilities have a chance for expansion. As pointed out previously a child cannot be expected to do this unaided. Many do and eventually make a success of their work, but it is not reasonable to expect that every child can do so, nor to assume that it is anything more than chance when a child does by accident, marked inclination, or repeated trials, land in a job which suits him and offers opportunity for development. Provision should be made for continuance during the early years of his employed life of the supervision by which a child is guided through school life. Some advice and individual consideration for each child going to work, given by a person familiar with the various fields of work open to children and having sympathy with and understanding of their desires and inclinations, can be of great service in effecting an early adjustment for the child with industrial life. Vocational guidance is still in the stage of experimentation, being one of the many problems concerning children of working age which have only recently received attention.

The whole problem of inducting children from school into industry, which has been considered in this study in its relation to the establishment of sound health in youth, can be met by the organization of Junior Employment Departments. England as long ago as 1910 saw the possibilities of centralization, and made provision for it in the Education (Choice of Employment) Act. For the past five years even more care has been given to working children than provided for in this act. Children going to work have the benefit of individual advice regarding work, of consideration of their physical well-being, of educational opportunity to train for a vocation either before or after they begin work. It is considered to the nation's interest "that all children receive a good chance of health and satisfactory employment." In England the juvenile labor exchange is under the direction of the school.

Junior employment departments or vocational guidance bureaus are developing in this country, and it has been found likewise advantageous to have the department closely connected with the school. When the activities for children of this age are closely related it is possible to unify the efforts of all and to be sure that all children are kept track of, and all information regarding individual children made use of. There are numerous reasons which make advisable such centralization of activities.

In Cleveland a free public employment bureau has been in existence for some years under the joint control of the state and city authorities. This bureau has conducted employment work for boys and girls for some time. The boys' work is in a separate department. The girls' and women's work has been combined in one department although previously separate. Careful investigation of the work in which young people are employed and of the establishments where they are to be sent has been a prominent feature of the junior employment work.

The work of this department could probably be more effectively carried on in direct connection with the Board of Education department which has supervision of all children going to work. By such a central organization the process of guiding children from school to work would be a continuous one, under unified control and direction, making contradiction of purpose impossible. Free interchange of opinion and advice between those ascertaining by examination the abilities of children and those directing them into industry would be possible and of great value. All of the data available, relating to the various phases of the employment of children, would be accumulated in one place and their value for research and action be unequaled.

Until such time as it is possible to effect a consolidation between the two departments it is recommended that their relations be made as close and direct as possible in order that the opinion of those examining the child who wishes to go to work, may direct the efforts of the employment bureau in finding the child suitable employment. Employment suited to a child's physical and mental abilities is essential. The degree of harmony attained between a child and his first job has no small influence in determining whether he will settle down and develop desirable work habits leading to a well oriented character or whether he is going to be dissatisfied in a short time and try another job, drifting about until his work habits become unsettled and his character unstable.

An outline for such a Vocational Guidance Department is appended. It contains in the plan of organization the essential activities involved in dealing with the children of working age, all of which are properly included in a department functioning under the Board of Education in any city. Some features included have proved their value in similar departments already organized in this country and abroad. A plan of this character is appropriately a part of this report as it emphasizes our opinion that the problem of the child going into industry is fundamentally one of health, and in order to protect his health adequately there must be a central bureau

which will serve as a bridge for his safe conduct from school into the industrial world. Proper consideration of a child's physical abilities comes first. This fact recognized and coupled with the other factors which must be considered, there is no reason why children should not benefit by their early industrial experience, rather than be permanently handicapped if not wasted to society by their ill-advised efforts at work, before they are equal to it or for which they are unfitted. A careful organization of the procedure of letting and getting children to work will give the health questions the important place which they should have, and will provide adequate machinery for continuing the task of supervision of children until they reach maturity.

SUGGESTED PLAN OF ORGANIZATION FOR A JUNIOR VOCATIONAL BUREAU OF THE BOARD OF EDUCATION OF CLEVELAND

To include boys 15 to 18 and girls 16 to 18 years of age. This period of years is suggested rather than 15 to 21 years, because it is the division made by the State Child Labor Law between children and adults. Also it simplifies the division of children's and adults' employment into two offices, which offices can then be physically as well as officially separate.

This organization will include all steps in the procedure of letting and getting a child to work, from the time when he is still in school and thinking of going to work, to the time when he is well established in suitable employment.

I. School Connections.

1. Continuous record cards to be used, containing the medical, mental, scholastic and social (including family) history of the child, beginning with his first year in school and following him through the grades to the office where he makes application for a work certificate. Such records have been used with great success in other cities.

2. Scholarship fund for children who otherwise would be obliged to go to work because of economic necessity.

3. Vocational talks to children who are thinking of leaving school, emphasizing the importance of longer schooling, but also giving introductory information regarding industrial life.

4. Published leaflets on occupations open to children, to contain specific information relative to various occupations for the benefit of children making ready to leave school for work.

II. School Attendance and Illegal Employment

The school attendance and illegal employment of children of working age must be closely checked up in order to make certain that every child going to work does so legally by going through the work certificate office where he must undergo a medical examination before receiving a work certificate.

In order that all information relative to children 15 to 18 years of age may be utilized, the school census records should be available at this office.

Special duties of one or more of the regular school attendance officers would be to follow up the school attendance of children of this age, to keep in touch with the State Factory Inspection Department regarding children at work, and to follow up all cases of children whose certificates have been returned, to see that they return to school if not at work. Correspondence has been successfully utilized to accomplish some of these ends.

III. Issuance of Work Certificates.

1. Establishment of birth and school records in accordance with the legal requirements.

2. Medical examinations for health certificates, as required by law. The physician, nurses and clerks are to make and record medical examinations and follow up children whose permits are held up, until remediable defects are corrected, or are refused because of physical disability. These children must be kept track of, to see that they get medical assistance when necessary or return to school if not allowed to be at work. The school medical record of a child is of service here.

3. Mental Tests—At present only marked subnormality is recorded in most offices. Intelligence tests are now used most effectively by many large corporations. Their use in this department is essential in aiding in the selection of suitable work for normal as well as for subnormal children.

IV. Vocation Bureau.

1. Continuous research in occupations open to children is necessary for the purpose of advising children wisely regarding work, and for the purpose of accumulating information in respect to the health hazards for young people in various types of work. Too little is known on this subject at the present time. Such information must be available to the physician diagnosing a child's physical capacity for employment.

2. Placement and Guidance—Connects children who have received work certificates with jobs, and has the advantage of all the facts established by previous examinations as to the child's physical and mental qualifications, for use in vocational guidance work.

V. Research.

Through the many contacts which this bureau would have, and the large amount of information in its files, special studies of related questions would be of value, as well as periodical analysis of information in the files.

VI. Advisory Committees.

NOTE—In the two months which have elapsed since the field work for this report was completed, steps have been taken by the Cleveland Board of Education towards the formation of such a bureau. The Bureau of Attendance of the Board of Education has been enlarged and its functions extended.

Records have been established which will carry the medical, social and school history of the child from the time when he first enters school to the date when he leaves school to apply for working papers. Vocational advice to such children is to be provided, and the possibility of arranging for employment work is being considered. Greater emphasis is being put on a child's physical status, ascertained by medical examinations, as the determining factor in deciding whether or not he shall receive a permit to work.

SUMMARY OF RECOMMENDATIONS

I. Recommendations Requiring Legislation.

1. The Ohio State Child Labor Law should be amended in the following particulars:

Age Requirements—The employment of boys before they are 16 years of age should be forbidden. Age and schooling certificates should be required of all boys under 18 years of age at work. This makes the age requirements for boys and girls the same.

In all cases in the law where an "age and schooling certificate" is mentioned the law should be changed to read "age, schooling and health certificate," inasmuch as the health certificate received by the child going to work is one of the most important factors to be considered in certifying a child for employment.

2. The Ohio School Code should be amended in the following particulars:

Educational Requirements—Girls 16 to 18 years of age are not now required to continue school if not employed. The law should be amended to include this requirement and to make similar requirement for boys 16 to 18 years of age.

Health Certificate—The section of the law relating to a health certificate for a child going to work should be changed. In no case should a child receive a certificate based on a previous record of the child's health. A thorough medical examination, made by a qualified physician, should be the requisite for every health certificate issued. These certificates should be issued in such a manner and for such periods of time as to insure periodical examinations of children over the two years from 16 to 18, or while they are employed on a certificate basis. Every health certificate should be issued for the specific job for which the child makes application for a permit. There should be included a provision for an adequate force of examiners and assistants, for the work of examination and necessary follow up.

Pledge of Employer—Added to this section of the law should be a clause requiring that the promise signed by the employer specify the exact nature of the work which the child is required or permitted to do.

Agricultural Work and Domestic Service are not now included by the Ohio Child Labor Law in the occupations under its supervision. There should be an age limitation of at least 12 for these occupations and a limitation of hours of work, similar to those limitations in hours of work in other occupations. A health certificate should be required of every child. Regulation of conditions of work may involve some difficulties needing the cooperation

of other agencies. Examinations for health certificates can be conducted in the same manner as for other occupations by the existing machinery without great difficulty.

3. The City Ordinance regulating street trades should be enforced, pending the inclusion of these trades in the State Child Labor Law. Certificates to boys to engage in this work and badges to be worn by them while at work, as specified in the ordinance, should be received from the work certificate office of the Board of Education, where each boy will receive a medical examination showing him to be physically fit for this kind of work, before he can receive a permit.

II. Recommendations re Existing Departments, State or Local.

1. *Enforcement of the State Child Labor Law* is under the direction of the Industrial Commission of Ohio. The law is not at the present time adequately enforced. Methods of work should be improved and the personnel for inspection increased, in order to eliminate the illegal employment of children, the extent of which the findings of this study indicate.

2. *Enforcement of the State School Law* is similarly inadequate. It is under the direction of the Board of Education. The number of School Attendance officers should be increased and the organization of the Attendance department and the Work Certificate Office revised. The School Census maintained by another department of the Board of Education should be more closely related to the department of Attendance, to aid in the work of checking up on the attendance of children, and especially those of working age.

3. *Medical Examination for Work Certificates*—The present organization is under the direction of the Department of Medical Inspection of the Board of Education. It needs to be considerably expanded and its working force increased. Health standards for children going into industry should be formulated, patterned after those soon to be issued by the Federal Children's Bureau Committee on Health Standards for Children in Industry. One of its functions, still to be developed, should be sufficient contact with the industrial field to assure familiarity with the jobs open to children, in order that the examining physicians may be able to decide intelligently as to the desirability of different kinds of work for the various children examined.

4. *Mental Examinations for Work Certificates*—There is at present no means of determining the mental capacities of children wishing to go to work, other than the school record, which is too brief to furnish any information except the fact that the child has completed the required school grade, except in the case of children who have been known in school as markedly subnormal. There should be in close relation to the work of medical examination for health certificates facilities by which to determine more accurately the mental capacities of children wishing to work, in order to aid in the selection of employment for them.

5. *Educational Training*—More educational preparation for the transition from school to industry is necessary. It is not within the province of a health survey to make specific recommendations as to how this shall be done, but the Board of Education or the State educational authorities should give this question careful consideration in the near future, and make provision for more effective industrial education. In particular the Board of Education should provide at once for systematic and thorough health instruction in the

grammar grades. Knowledge of the elements of hygiene and sanitation is essential to the child entering industry as well as knowledge of the character of the health hazards which he will encounter in industry.

6. *Junior Employment*—The junior employment work at present under the direction of the Public Employment Bureau should be carried on in more direct connection with that department of the Board of Education having supervision of all children going to work, in order to have unified control and direction, making contradiction of purpose impossible. Until such time as it is possible to effect this consolidation it is recommended that the relation between the departments be made close and direct, in order that the opinion of those examining a child applying for a work certificate may direct the efforts of the employment bureau in finding suitable employment for the child.

7. *Attendance Department*—Plans have been made recently to enlarge and extend the functions of the Attendance Department of the Board of Education. Sufficient prominence should be given to the medical and mental examinations in all questions relating to the issuance of work certificates and to vocational guidance, as the medical and mental examinations, properly conducted, give unequalled opportunity to make adjustment between the law and individual variation in capacity and physical development. More dependence should be placed on the results of careful examinations of children in deciding as to their employment in various occupations, thus lessening hardship or unfairness in individual cases.

TABLE I.

Classification of 1,521 Industrial Organizations by Size Groups Including Employees

Group by Size of Organization	Number of Organizations	Per Cent of All Organizations	Number of Employees in Group	Per Cent of All Employees All Groups	Average Number Employees per Organization
1,000 and over.....	39	2.56	84,359	42.98	2,163.0
500 and over.....	80	5.25	112,535	57.34	1,406.6
400 and over.....	100	6.57	121,362	61.84	1,213.6
300 and over.....	134	8.80	132,802	67.67	991.0
200 and over.....	182	11.96	144,564	73.66	794.2
100 and over.....	294	19.32	155,246	79.10	528.0
1 and over.....	1,521	100.00	196,246	100.00	129.0
Less than 1,000.....	1,482	97.44	111,887	57.02	75.4
Less than 500.....	1,441	94.75	83,711	42.66	58.0
Less than 400.....	1,421	93.43	74,884	38.16	52.6
Less than 300.....	1,387	91.20	63,444	32.33	45.7
Less than 200.....	1,339	88.04	51,682	26.34	38.5
Less than 100.....	1,227	80.68	41,000	20.90	33.4
1,000 and over.....	39	2.56	84,359	42.98	2,163.0
500 to 1,000.....	41	2.69	28,176	14.36	687.2
400 to 500.....	20	1.32	8,827	4.50	441.3
300 to 400.....	34	2.23	11,440	5.83	336.4
200 to 300.....	48	3.16	11,762	5.99	245.0
100 to 200.....	112	7.36	10,682	5.44	95.3
1 to 100.....	1,227	80.68	41,000	20.90	33.4
Totals.....	1,521	100.00	196,246	100.00	129.0

TABLE II.

Medical Service in Industrial Organizations

Group by Size of Organizations	Total Number Organ. in Group	Number Organ. with Medical Service	Total Number Employees in Group	Total Number Employees Recvg. Service	Per Cent Organ. in Group Served	Per Cent Emps. in Group Served	Per Cent Emps. Served of All Emps.	Per Cent Organ. Served of All Organ
1,000 and over.....	39	32	84,359	72,196	82.05	85.58	36.78	2.10
500 to 1,000.....	41	30	28,176	20,786	73.17	73.77	10.59	1.97
200 to 500.....	102	7	32,029	2,118	6.86	6.61	1.07	0.46
1 to 200.....	1,339	3	51,682	365	0.22	0.70	0.18	0.20
Totals.....	1,521	72	196,246	95,465	4.73	48.64	48.64	4.73
1,000 and over.....	39	32	84,359	72,196	82.05	85.58	36.78	2.10
500 and over.....	80	62	112,535	92,982	77.50	82.62	47.37	4.07
200 and over.....	182	69	144,564	95,100	37.91	65.78	48.45	4.53
1 and over.....	1,521	72	196,246	95,465	4.73	48.64	48.64	4.73

TABLE III.

Personnel of Medical Departments

Group by Size of Organization	Number Organ. with Med. Service	Number of Employees Served	No. of Ind. Disp.	No. of Full-Time Phys.	No. of Part-Time Phys.	No. of Phys. on Call	No. of Trnd. Nurses	No. of Prac. Nurses	No. of Clerical Pers.
1,000 and over.....	32	72,196	53	6	41	8	69	12	14
500 to 1,000.....	30	20,786	30	1	16	8	18	7	0
200 to 500.....	7	2,118	7	0	4	1	6	0	0
1 to 200.....	3	365	3	0	1	1	0	1	0
	—	—	—	—	—	—	—	—	—
Totals.....	72	95,465	93	7	62	18	93	20	14

TABLE IV.

Administrative Relations of Fifty-six Medical Departments

Group by Size of Organizations	MEDICAL DEPARTMENT RESPONSIBLE TO				Total
	Administration	Production	Employment	Claims	
1,000 and over... ..	7	5	15	2	29
500 to 1,000.....	8	5	8	0	21
200 to 500.....	1	0	3	0	4
1 to 200.....	2	0	0	0	2
	—	—	—	—	—
Totals.....	18	10	26	2	56

TABLE V.

Medical Service in Mercantile Establishments and in Public Utilities

	No. Estab. with Medical Service	No. of Dispensaries	No. of Employees Served	No. of Full-Time Phys.	No. of Part-Time Phys.	No. of Phys. on Call	No. of Trnd. Nurses	No. of Prac. Nurses	No. with Vistg. Nursing
Mercantile.....	6	6	9,107	1	3	2	5	2	2
Public Util.....	6	7	13,302	0	7	1	6	1	2
	—	—	—	—	—	—	—	—	—
Totals.....	12	13	22,409	1	10	3	11	3	4

TABLE VI.

Accident Frequency and Severity Rates for Cuyahoga County
Based Upon Ohio Industrial Commission Report for
July to December, 1914

For six months period:

Accidents causing death.....	44
Accidents causing permanent partial disability.....	330
Accidents causing disability over seven days.....	3,892
Accidents causing disability two to seven days.....	4,571

Time Loss:

Cases fatal (6,000 days each).....	264,000 days
Permanent partial disability.....	52,127 days
Temporary disability, over seven days.....	103,976 days
Temporary disability, under seven days.....	9,199 days
<hr/>	
Total time loss, all accidents, six months.....	429,302 days

Accepting estimate of Bulletin 9 (1915), Industrial Commission, employees in industry numbered 185,000.

Estimated number reportable accidents annually.....	17,344
Frequency rate (number per 1,000 full-time workers).....	93.7
Estimated number days lost per year.....	858,604
Severity rate (days lost per worker per year).....	4.53

TABLE VII.

Accident Frequency and Severity Rates for Groups of Operatives
Employed Within Selected Areas

Based Upon Reports Furnished by the Industrial Commission of Ohio Covering
the Period of June 1st to November 30th, 1919

Group	Number of Employees	Accidents During Six Months			Estimated Yearly Total	Freq. Rate	Estimated Yearly Time Loss	Sever- ity Rate
		Fatal	7 Days and Less	More than 7 Days				
I.	24,298	3	905	215	2,246	92.4	33,927	1.3'
II.	19,600	6	2,147	520	5,346	276.3	74,345	3.7
III.	10,193	2	1,371	287	3,320	325.7	33,945	3.3
<hr/>								
Totals	54,091	11	4,423	1,022	10,912	201.7	142,217	2.6

Time losses were estimated by reckoning a fatal accident as equivalent to 6,000 days.

Employing average values previously published by the Industrial Commission, temporary disability of seven days or less was reckoned at 2.1 days; temporary disability of more than seven days, at 28.2 days.

TABLE VIII.

Comparative Accident Frequency and Severity Rates in the Construction and Metal Trades

Based Upon Statistics Published by the Industrial Commission of Ohio for Cuyahoga County, July to December, 1914

	Construction Trades	Metal Trades
Number of employes.....	20,000	72,900
Accidents (6 months):		
Fatal.....	19	10
Permanent partial disability.....	30	71
Temporary disability.....	1,393	3,825
Total number accidents.....	1,442	3,906
Accidents (calculated for one year).....	2,884	7,812
Accident frequency rate.....	144.2	107.1
Corrected for assumed 10-hour day, 200-day year.....	216.3	
Corrected for assumed 8-hour day, 200-day year.....	270.3	
Calculated time loss, days per year.....	290,868	246,858
Accident severity rate.....	14.5	3.38
Corrected for assumed 10-hour day, 200-day year.....	21.0	
Corrected for assumed 8-hour day, 200-day year.....	27.2	

The corrections above noted are made in consideration of the fact that many workers in the construction trades do not work a 3,000-hour year, which is the normal basis of computation of frequency and severity rates.

The time losses given in this table were calculated from those published by the Industrial Commission, with the exception of allowances for fatal accidents, which were reckoned as each equivalent to a loss of 6,000 days.

TABLE IX.

Classification of 79 establishments employing women, presenting numbers of various establishments, numbers of women therein employed, and group totals.

Group	No. of Establishments	Group Total	Nature of Group Members	No. of Female Employees	Group Total
Industrial.....	23	....	Metal Trades.....	3,691	.....
	11	....	Knitting and Textile.....	4,642	.....
	7	....	Garment Trades.....	2,700	.....
	6	....	Candy Factories.....	371	.....
	3	....	Paper Box Factories.....	220	.....
	2	....	Tobacco Factories.....	375	.....
	5	57	Miscellaneous.....	614	12,613
Mercantile.....	7	7	Department Stores.....	.....	6,730
Personal Service.....	6	....	Laundries	505	.....
	3	....	Hotels.....	708	.....
	2	11	Restaurants.....	245	1,458
Public Utilities.....	2	....	Telephone Companies.....	1,675	.....
	2	4	Telegraph Companies.....	430	2,105
Totals.....	79				22,906

TABLE X.
Classification of 57 visited industrial establishments employing women, by
size-groups, based on total of male and female employees.

Size Group	Metal Est. W.	Knitting Est. W.	Garment Est. W.	Boxes Est. W.	Candy Est. W.	Miscellaneous Est. W.	Totals Est. W.
1,000 and over.....	9 1,678	1 1,500	0	0	0	1 400	11 3,578
500 to 1,000.....	6 884	4 2,197	5 2,381	0	0	0	15 5,462
200 to 500.....	6 804	5 885	1 189	1 60	1 180	3 525	17 2,643
1 to 200.....	2 325	1 60	1 130	2 160	5 191	3 64	14 930
<hr/>							
Totals.....	23 3,691	11 4,642	7 2,700	3 220	6 371	7 989	57 12,613

TABLE XI.
Classification of weekly hours of employment for women in 56
industrial establishments.

Group	Less than 40		44-46		46-48		48-49		49-50		50		Totals
	Est.	W.	Est.	W.	Est.	W.	Est.	W.	Est.	W.	Est.	W.	
Metal.....	1	200	1	35	2	196	5	1,033	5	828	8	1,299	22 3,591
Knitting and Textile.....	.....	.....	1	60	1	210	1	1,500	2	769	6	2,103	11 4,642
Garment.....	2	1,025	3	825	2	850	.....	.....	.....	.....	.....	.....	7 2,700
Candy.....	.....	.....	1	18	1	18	1	180	.....	.....	3	155	6 371
Miscellaneous.....	.....	.....	1	8	1	40	.....	.....	1	150	7	1,011	10 1,209
Totals.....	3	1,225	7	946	7	1,314	7	2,713	8	1,747	24	4,568	56 12,513

TABLE XII.

Classification of starting weekly wage rates for women in 55 industrial establishments employing women.

Group	12-13 Dollars	13-14 Dollars	14-15 Dollars	15-16 Dollars	16-17 Dollars	17-17.50 Dollars	Totals
al.....	---	1	7	6	5	2	21
ting and Textile..	4	2	2	2	1	---	11
nent.....	1	---	5	1	---	---	7
ly.....	---	4	---	---	2	---	6
xellaneous.....	3	1	2	2	2	---	10
Totals.....	8	8	16	11	10	2	55

TABLE XIII.

Classification of luncheon facilities in 56 industrial establishments employing women.

Group	Cafeteria	Lunchroom Selling Supplementary Lunch	Lunchroom Only	No Lunchroom Used	Totals
al.....	11	3	7	2	23
ting and Textile.....	5	---	3	3	11
nent.....	3	1	3	---	7
ly.....	2	---	2	1	5
xellaneous.....	2	---	8	---	10
Totals.....	23	4	23	6	56

TABLE XIV.

Classification of 33 industrial establishments employing women and having centralized employment service, by size-groups based on total number of employes.

Group	1,000 and Over	500 to 1,000	200 to 500	1 to 200	Totals
Metal.....	6	3	6	1	16
Knitting and Textile.....	1	3	0	0	4
Garment.....	0	5	1	1	7
Candy.....	0	0	1	2	3
Miscellaneous.....	1	0	0	2	3
Totals.....	8	11	8	6	33

TABLE XV.

Classification of 23 industrial establishments employing supervisory women, by size-groups based on total number of employes.

Group	1,000 and Over	500 to 1,000	200 to 500	1 to 200	Totals
Metal.....	4	0	3	0	7
Knitting and Textile.....	0	4	0	0	4
Garment.....	0	5	0	1	6
Candy.....	0	0	1	3	4
Miscellaneous.....	0	0	0	2	2
Totals.....	4	9	4	6	23

TABLE XVI.

Total Number of Children in Cleveland and Number at Work, By Age and Sex

	15		16		17		18		19		20		Totals	
	Total No.	Work- ing	Total No.	Work- ing	Total No.	Work- ing	Total No.	Work- ing	Total No.	Work- ing	Total No.	Work- ing	Total No.	Work- ing
Boys.....	5,626	1,258	5,778	3,366	5,669	4,444	6,074	5,215	5,901	5,272	6,409	5,951	35,457	25,506
Girls.....	5,535	.....	5,663	2,936	5,411	3,842	6,141	5,110	5,181	4,480	5,201	4,744	33,132	21,112
Total.....	11,161	1,258	11,441	6,302	11,080	8,286	12,215	10,325	11,082	9,752	11,610	10,695	68,589	46,618
Per cent at work of total number.....	11.2%		55.0%		74.8%		84.5%		87.99%		92.1%		67.9%	

TABLE XVII.

Number of Children at Work, By Age and Sex

From the Work Certificate Records, September, 1918 to September, 1919

	Permits September, 1918 to June, 1919	Vacation Permits June-September, 1919	Total Number at Work
Boys.....	1,444	581	2,025
Girls.....	2,057	546	2,603
	<hr/>	<hr/>	
Total.....	3,501	1,127	4,628

TABLE XVIII.

Number of Children at Work, By Age and Sex

From the Records of the Industrial Commission of Ohio, 1919

	Clerical Workers	Wage Earners	Sales People	Total Workers
Boys.....	617	2,248	92	2,957
Girls.....	573	1,416	83	2,072
	<hr/>	<hr/>	<hr/>	<hr/>
Total.....	1,190	3,664	175	5,029

TABLE XIX.

Comparison of Tables 16-18 for Number of Children at Work

	School Census Ages 15-18	Work Certificate Records. Ages 15-16 and 16-18	Ind. Commission Records. ■ Ages 15-18
Boys.....	9,068	1,444	2,957
	(15-18)	(15-16)	(15-18)
Girls.....	6,778	2,057	2,072
	(16-18)	(16-18)	(16-18)
	<hr/>	<hr/>	<hr/>
Total.....	15,846	3,501	5,029

TABLE XX.

Occupations Employing Children Under 18, By Age and Sex

Analysis of Records of Industrial Commission of Ohio, 1919

	Construc- tion	Manufac- turing	Service	Trade, Retail and Wholesale	Telephone and Telegraph	Total
Boys—						
Clerical Workers.....	15	309	116	157	20	617
Wage Earners.....	67	1,778	56	316	31	2,248
Salespeople.....	1	3	....	88	....	92
	—	—	—	—	—	—
Total.....	83	2,090	172	561	51	2,957
Girls—						
Bookkeepers.....	12	205	92	187	77	573
Wage Earners.....	....	688	43	299	386	1,416
Salespeople.....	....	6	....	77	....	83
	—	—	—	—	—	—
Total.....	12	899	135	563	463	2,072
Total—						
Clerical Workers.....	27	514	208	344	97	1,190
Wage Earners.....	67	2,466	99	615	417	3,664
Salespeople.....	1	9	....	165	....	175
	—	—	—	—	—	—
Grand Total.....	95	2,989	307	1,124	514	5,029

Per Cent of Total Number Employed of Each Group by Sex

	Clerical Workers		Wage Earners		Sales People		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Boys.....	617	20.9%	2,248	76.0%	92	3.1%	2,957	100%
Girls.....	573	27.6%	1,416	68.4%	83	4.0%	2,072	100%
	—	—	—	—	—	—	—	—
Total.....	1,190	23.7%	3,664	72.8%	175	3.5%	5,029	100%

TABLE XXI.

Distribution of Children in All Occupations and in Leading Manufactures for 1915 and 1919

From the Records of the Industrial Commission of Ohio, 1915 and 1919

Occupation	Boys		Girls	
	1915	1919	1915	1919
Construction.....	58	83	0	12
Manufacturing.....	1,638	2,090	859	899
Service.....	37	172	6	135
Trade, Retail and Wholesale.....	323	561	299	563
Telephone and Telegraph Work.....	44	51	35	463
Total.....	2,100	2,957	1,199	2,072

Leading Manufacturers	Boys		Girls	
	1915	1919	1915	1919
Autos and Auto Parts.....	66	120	53	18
Bolts, Nuts, Etc.....	44	76	6	3
Clothing, Men's and Women's.....	26	37	286	115
Confectionery.....	8	0	32	76
Copper, Tin, Etc.....	76	61	0	19
Electrical Machinery.....	71	277	14	53
Foundry and Machine Shop Products....	200	334	12	53
Gas and Electric Fixtures.....	24	96	23	187
Hosiery and Knit Goods.....	36	15	121	29
Printing and Publishing.....	202	242	26	81
Sewing Machines.....	0	160	0	10
Steel Works and Rolling Mills.....	76	4	0	0
Woolen and Worsted Goods.....	20	1	7	42
Total.....	849	1,423	580	686

TABLE XXII.

Weekly Wage Rates for Children By Occupation and Sex

From the Report of the Industrial Commission of Ohio for 1919

Wages	Construc- tion	Manufac- turing	Service	Trade, Retail and Wholesale	Telephone and Telegraph	Total	Total
\$5.00—							
.....	0	20	4	29	1	54	
.....	0	2	2	17	0	21	75
5.00—							
.....	1	13	3	23	1	41	
.....	0	4	0	2	0	6	47
7.00—							
.....	7	8	5	35	2	57	
.....	1	1	5	24	0	31	88
8.00—							
.....	5	31	11	19	5	71	
.....	0	14	7	8	0	29	100
10.00—							
.....	34	87	23	74	11	229	
.....	0	47	9	49	4	109	338
\$12.00—							
.....	14	268	43	109	12	446	
.....	1	201	40	177	328	747	1,193
\$15.00—							
.....	11	567	49	138	10	775	
.....	5	371	33	172	86	667	1,442
\$18.00—							
.....	4	473	16	87	6	586	
.....	2	178	14	83	20	297	883
\$21.00—							
.....	2	424	19	40	0	485	
.....	1	57	14	23	8	103	588
\$25.00—							
.....	3	154	0	4	2	163	
.....	1	18	5	7	10	41	204
\$30.00—							
.....	1	42	0	0	1	44	
.....	0	6	2	1	5	14	58
\$35.00—							
.....	1	3	1	3	0	8	
.....	1	0	2	0	2	5	13
.....	—	—	—	—	—	—	—
tal.....	95	2,989	307	1,124	514	5,029	5,029

TABLE XXIII. A

Analysis of Records of 100 Newsboys in Cleveland, Showing Age,
School Grade and Mental Capacity

Age	School Grade						Total	Mental Capacity			
	I.	II.	III.	IV.	V.	VI.		Good	Fair	Poor	Total
6	4	----	----	----	----	----	4	1	2	1.	4
7	1	3	----	----	----	----	4	2	----	2	4
8	----	6	2	----	----	----	8	3	4	1	8
9	----	2	2	----	----	----	4	3	1	----	4
10	1	----	2	5	4	----	12	7	3	2	12
11	1	----	2	5	12	1	21	11	5	5	21
12	(Special 2)		----	----	10	5	17	9	5	3	17
13	(Special 6)		2	----	5	12	25	8	11	6	25
14	----	----	----	----	2	1	3	----	----	3	3
15	----	----	----	----	1	1	2	----	----	2	2
	—	—	—	—	—	—	—	—	—	—	—
Total	7	11	10	10	34	20	100	44	31	25	100

TABLE XXIII. B

Analysis of Records of 100 Newsboys, Continued, Showing Age,
Health and Hours of Work at Night

Age	Health				Work Till Night						
	Good	Fair	Poor	Total	5	6	7	8	9	10	Total
6	3	---	1	4	----	2	1	----	1	----	4
7	----	1	3	4	----	1	2	1	----	----	4
8	4	1	3	8	5	1	----	1	----	1	8
9	1	1	2	4	----	1	1	2	----	----	4
10	6	2	4	12	3	4	1	1	1	2	12
11	8	3	10	21	3	9	5	2	1	1	21
12	8	4	5	17	2	9	2	3	----	1	17
13	17	3	5	25	3	12	2	4	3	1	25
14	3	----	----	3	1	1	----	----	----	1	3
15	1	----	1	2	2	----	----	----	----	----	2
	—	—	—	—	—	—	—	—	—	—	—
Total	51	15	34	100	19	40	14	14	6	7	100

TABLE XXIV.
Medical Examination of Children for Work Certificates
From Cleveland Board of Education, September, 1919 to April, 1920

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	Total
Boys—									
Defective.....	74	85	45	41	55	81	60	51	492
Not Defective.....	119	64	44	56	68	68	49	41	509
Total Examined.....	193	149	89	97	123	149	109	92	1,001
Girls—									
Defective.....	76	114	71	55	54	80	98	71	619
Not Defective.....	142	124	104	79	97	60	82	40	728
Total Examined.....	218	238	175	134	151	140	180	111	1,347
Total—									
Defective.....	150	199	116	96	109	161	158	122	1,111
Not Defective.....	261	188	148	135	165	128	131	81	1,237
Total Examined.....	411	387	264	231	274	289	289	203	2,348
CORRECTIONS AND TREATMENT									
Teeth.....	15	60	42	37	44	60	65	44	367
Tonsils.....	2	49	2	---	2	2	---	4	61
Vision.....	5	19	25	21	15	12	12	---	109
Adenoids.....	---	1	---	---	---	1	---	---	2
Skin Treated.....	---	1	1	---	---	2	1	---	5
Total Corrections.....	22	130	70	58	61	77	78	48	544
Special Examination.....	---	---	10	7	14	5	15	28	79
Examinations.....	---	5	5	10	17	18	7	---	62

TABLE XXV.
Classification of Physical Defects Found in 2,348 Children Examined
for Working Certificates

September, 1919, to April, 1920			
September, 1919-April, 1920	Boys	Girls	Total
Teeth.....	283	340	623
Tonsils.....	34	8	42
Adenoids.....	7	3	10
Glands.....	1	0	1
Nasal Obstruction.....	1	0	1
Hearing.....	7	4	11
Vision.....	77	122	199
Anemia.....	0	1	1
Malnutrition.....	195	208	403
Heart Trouble.....	11	10	21
Goitre.....	1	16	17
Other Defects.....	11	6	17
Tuberculosis, Positive and Suspicious.....	.....	.....	27
Trachoma .....	.....	.....	2
Total Defects.....	628	718	1,375

Analysis of 148 Records of Mentally Subnormal Children Applying for Work Certificates

From Cleveland Board of Education, September, 1919 to March, 1920

Boys 15 to 16 Years of Age. Of 978 Records Examined There Were 84 Cases of Subnormal Mentality, or 8.6%

Psycho- logical Age	Number	Nutri- tion	PHYSICAL DEFECTS					Total Defects	Permit Granted	Permit Refused	Permit Granted After Corrected	Work- ing	Not Working
			Vision	Teeth	Tonsils	Hear- ing	Suspicious T. B.	Miscel- laneous					
7	5	2	1	3	1	0	0	2	1	2	2	2	2
8	17	3	1	6	1	0	3	4	9	4	4	9	8
9	45	13	6	17	2	0	2	9	26	10	9	27	18
10	16	3	0	3	0	0	1	3	12	1	3	9	7
11	1	0	0	0	0	0	0	0	1	0	0	1	0
	—	—	—	—	—	—	—	—	—	—	—	—	—
Total.....	84	21	8	29	4	0	6	18	49	17	18	48	35

Girls 16 to 18 Years of Age. Of 1,345 Records Examined, There Were 64 Cases of Subnormal Mentality, or 4.8%

Psycho- logical Age	Number	Nutri- tion	Vision	Teeth	Tonsils	Hear- ing	Suspicious T. B.	Miscel- laneous	Total Defects	Permit Granted	Permit Refused	Permit Granted After Corrected	Work- ing	Not Working
7	2	1	1	1	0	0	0	1	4	0	0	2	2	0
8	21	5	5	8	0	2	0	3	23	14	4	3	8	6
9	28	9	5	9	1	0	0	2	26	17	3	8	7	10
10	11	4	2	1	0	0	0	2	9	8	1	2	6	2
11	2	1	0	0	0	0	0	0	1	2	0	0	1	1
	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total.....	64	20	13	19	1	2	0	8	63	41	8	15	24	19

THE CLEVELAND HOSPITAL AND HEALTH SURVEY REPORT

List of Parts and Titles

- I. Introduction.
General Environment.
Sanitation.**
- II. Public Health Services.
Private Health Agencies.**
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Education and Practice in Medicine, Dentistry, Pharmacy

PART EIGHT

**Cleveland Hospital and
Health Survey**

Education and Practice in Medicine, Dentistry, Pharmacy

PART EIGHT

Cleveland Hospital and
Health Survey

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by
THE CLEVELAND HOSPITAL COUNCIL
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Preface

The Hospital and Health Survey of Cleveland was made at the request of the Cleveland Hospital Council.

The Survey Committee appointed to be directly responsible for the work and through whose hands this report has been received for publication consisted of the following:

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The expenses of the Survey and of the publication of the report have been met by appropriations received from the Community Chest, through the Welfare Federation, of which the Hospital Council is a member.

The report as a whole, or by sections, can be obtained from the Cleveland Hospital Council. A list of the parts will be found in the back of this volume, together with prices.

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Medical Education and Practice in Cleveland

By HAVEN EMERSON, M. D.

SCHOOL OF MEDICINE OF WESTERN RESERVE UNIVERSITY

WHERE there is but one institution of learning in a community, dealing with education in the liberal professions primarily concerned with the prevention and care of disease, the responsibility for programs and accomplishment is easy to fix and the resources to be looked to for advancement are sharply limited. In Cleveland through eliminations, mergers and absorptions the Western Reserve University finds itself at the present the only institution in Cleveland responsible for the preparation of physicians, dentists and pharmacists for the legal practice of these professions. For nurses also the only agency offering education in the public health field is provided by the University.

Since public service in the field of medical practice and in preventive medicine can not rise higher than its source, it is natural that where failures of imagination, scope, technic and standards in the professions are found the inquirer turns to the University to seek the cause. University education is subject to the same three main limitations as affect education in general and they are apparently, in the order of their importance, the ideals of the teachers, the character of administrative leadership and organization, and the material resources to provide the teachers and the facilities for their development.

For the noticeably deficient recognition by the laity and by the medical profession of Cleveland, of many specialties in medicine which now demand long preparation, exclusive devotion and constant study in order to reap the benefit and provide the service which modern knowledge permits, we cannot but hold the policies of the medical teachers responsible. Under both medicine and surgery important and necessary special branches have developed elsewhere which are not provided for in Cleveland. In tuberculosis, radiology, neurology, psychiatry, urology, industrial and preventive medicine, and orthopedics, opportunities have been and are still lost which the medical school owes to students, practitioners and the sick of the city. There is much encouragement in the fact that during the past college year decisions have been reached which should broaden the field of surgery by providing for a department of orthopedics having a large measure of independent development, and under the general head of medicine will arrange for a department of psychiatry and neurology with obligations to provide for the necessary clinical teaching in these specialties. Much more could still be done to encourage and assist undergraduate students and recent graduates to cultivate new and special fields in research and practice as is common in other centers of medical education.

The contact made with a wide circle of workers in medical and kindred fields, especially among those concerned with the social and preventive application of medical sciences in Cleveland, gradually developed the conviction among the members of the Survey staff that the regard, respect, dependence and affection felt by the public for the University fall far short of what one might expect. Little exact knowledge was found to be possessed concerning many of the important problems of medical and dental education by those in responsible positions as trustees and executives.

In the Medical School the constitution and activities of the executive committee of the faculty seem to meet all the needs and yet contact between the faculty and the trustees is on an uncertain and unsatisfactory basis. Definite assignment of duties and responsibilities are not called for from the trustees. It is a matter of first importance that the appeal for support for education should be based on recognition by the public of eminent service given to it by the University, and upon entire confidence in the practical value of the training given and of the researches undertaken.

In the words of the business salesman, the University has not sold itself to the Cleveland public. Leadership, organization and service are needed with this object in view.

To this end it is suggested that much strength to the University organization might be expected by enlisting the active interest and work of trustees who are still in the midst of the actual problems of industry, professions and public service, as well as those to whom the honor of trusteeship is rather a recognition of past accomplishments and of readiness to be generous in financial support.

Among the trustees should be those chosen by the alumni of the various professional schools from their own professions, officially delegated to represent the graduates. From no representative group of citizens will be found those who will serve the University more faithfully or bring to its councils more vision, ideals and influential support than from the body of graduates of the Medical School.

As to the third element in determining a university's ability to meet its public obligations: namely, material resources for teaching and research, it is worth noting that at the present time when building costs are so exorbitant and teachers of all kinds are so ill paid, the simplest business logic will advise investment largely in men, brains and service with, for the time being, no more outlay on buildings than is necessary to give adequate facilities for the teachers, the classes and such research as can only be done within University buildings. Once the relative importance of the various financial needs which the professional colleges face is outlined, the generosity and pride of Clevelanders in their important public undertaking, the Western Reserve University, can be counted on to find the funds.

PROBLEMS OF CONSTRUCTION AND ENDOWMENT

In considering the relative importance of the two large undertakings which face the trustees: namely, the erection of new Medical School buildings and endowment or more adequate financial support for the teaching departments of the Medical School, and the erection and maintenance of a University Hospital Group, a few fundamental statements of fact and expressions of opinion are offered before presenting concrete recommendations for order of procedure, as suggested for the consideration of the Board of Trustees.

In the first place, the University now controls at City Hospital, at Lakeside, at the Maternity Hospital and at the Babies' Dispensary and Hospital, such facilities for clinical teaching as meet the most ambitious needs for the highest grade of medical education, and very broad opportunities for research in both laboratory and clinical branches of medical science.

At Lakeside and at City Hospital 936 beds offering clinical material in medicine, surgery, pediatrics, contagious diseases, tuberculosis, venereal disease and mental disease are available and under exclusive University control for 12 months in the year. Twenty-two beds for maternity cases and 1,500 confinements a year in in- and out-patient services are available for teaching purposes. With the proposed doubling of the capacity of City Hospital, to which the city committed itself by vote at the primary elections in April, 1920, the field for clinical study at that hospital will be still further increased. The City Hospital will probably always include groups of patients who cannot legally be cared for except in such a public hospital. The City Hospital will, in all probability, always have a larger group of patients available for clinical instruction in contagious diseases, tuberculosis, venereal diseases, mental and nervous diseases, chronic, incurable and inoperable medical and surgical cases than are likely to be or should be accommodated in any privately controlled institution, even if devoted exclusively to teaching purposes. The value of this asset in clinical teaching can hardly be over-emphasized.

The close physical situation of Medical School buildings, in relation to the home of other faculties of the university departments, is considered very desirable, if not absolutely essential, for the broadest and most catholic relationship between the various teaching groups.

The control by a university medical school of its own hospital, in order to permit of intensive study and special methods of education in groups of patients selected particularly for their value in medical education and research, is considered entirely desirable and the complete dependency of a medical school upon a public department for its sole hospital facilities is not considered safe in the present crude and politically precarious condition of municipal government in Cleveland, as elsewhere in the United States. The physical separation of the City Hospital from the Medical School buildings, which it may be presumed will ultimately be located in the vicinity of the University campus, would not necessarily put any particular inconvenience in the way of its use by medical students, although the time of medical

teachers might be wasted to a slight degree unless there were certain laboratory or research facilities added to the City Hospital equipment at the expense of the University.

It is believed that the first project for which money should be raised and plans made for construction, equipment and maintenance, is a building or buildings for the Medical School, to include the various facilities needed for teaching and research, such as can be carried on outside of the immediate walls of the hospital.

It is recommended that, at the same time that the project for Medical School buildings is undertaken, the trustees prepare a plan for the financial support, either by endowment or with annual pledges, which will provide adequately for the salaries and service needs of each department, so as to insure the provision of personnel to give the University a 100% return for its investment in its greatest asset—the brains of its teachers.

It is recommended that the trustees of the University devote their best efforts to accomplish such changes as may be needed in the City Charter and such action as may be necessary from the officers of the city government as to insure the appointment of trustees selected from representative groups of citizens by the Mayor, to be responsible for the administration of the City Hospital. In support of this recommendation it must be said that the University has a greater stake in the permanency of policy, in the non-political character of administration, and in the standard of equipment, service and support given to the City Hospital than has any other group in the community. It would probably cost upward of \$25,000,000 at present construction costs for the University to obtain, through private means, anything approximating the range of material for clinical teaching that will be available and at their service at the enlarged City Hospital. It must be noted that the value of this material in medical education is now and always will be jeopardized by political mischief or accident until the present method of appointing the superintendent of City Hospital and his responsibility practically direct to the Mayor, to whom alone he is indebted for his appointment, is replaced by a method of appointment and administration which resembles more closely the system found necessary to insure continuous and high grade hospital policies and administration in private institutions under boards of trustees. It is, furthermore, felt that the University owes to the public the use of its prestige and influence to get the City Hospital out of politics, if for no other reason than that the sick poor at City Hospital are entitled to as constant and scientific medical service as the University would expect to provide in its own privately controlled institutions.

When the above three main accomplishments have been successfully carried to completion or have been brought, by the efforts of the University, within promise of accomplishment, and when funds have been obtained which would justify undertaking a building program, at a cubic foot cost for construction considerably less it is hoped than prevails at the present time,

the plans of the University Trustees for a joint hospital project, involving the Babies' Hospital, Maternity Hospital and Lakeside Hospital should be carried through essentially as they are at present worked out but not necessarily as a single construction undertaking. There is good reason to expect substantial benefits to result from prosecuting all these projects at the same time, if the relative importance of the several undertakings is kept continuously in mind.

Of the needs of the University Medical School and of the needs of the community for hospital beds it is quite clear that a hospital service for children of all ages is much greater than is the need for beds for maternity or for general medical and surgical patients. It is, therefore, recommended that as soon as funds can be provided the trustees proceed with the erection of the so-called Babies' Hospital project, which it is understood will provide for children of all ages to a total of 150 beds. The next in the order of importance, and the next by considerable margin of importance in terms of medical teaching or community need, would be the construction of a Maternity Hospital which is planned for 100 beds. In approximately the same position, but perhaps slightly less urgent as a need for medical education, though obviously needed by the community sooner or later, is the erection of the new Lakeside Hospital. As soon as funds can be provided, therefore, should come the construction of the proposed 500-bed hospital for general medical and surgical patients, including a pavilion for patients with mental and nervous disorders for the department of psychiatry.

COMMUNITY RELATIONS

Although the minimal hospital bed needs of the community indicate that Cleveland will require the additional 400 beds which the University Group project would provide for the total bed capacity of Cleveland, the Survey cannot recommend that \$12,000,000 be spent for this purpose when medical teaching needs do not demand more beds and when that number of beds could be provided for the city through additions to other hospitals at a half, and possibly at a third, of this expense, if built solely with the object of providing adequate hospitalization for the sick.

Among the reasons often voiced in Cleveland for lack of full professional and public trust in and support of the Medical School is that, under the reasonable argument of needs for clinical teaching, the nomination of professional staffs of hospitals is permitted by the trustees of certain hospitals to rest with the faculty of the Medical School. Whether or not there is justice in this criticism it is apparent that no asset accrues to the Medical School if it is in a position of exclusive control over facilities not really needed for teaching purposes. It is suggested that any formal affiliations with hospitals except those now maintained at the City Hospital and the three organizations of the University Hospital Group, (Lakeside, Maternity and Babies') be severed, unless the boards of trustees of the hospitals specifically request the University through its medical faculty to relieve them of the responsibility of selecting the members of the professional staff of their hospitals. Further than this it is thought that the funds and energies of the Univer-

sity and its teachers should not be devoted to operating public health services such as a city-wide prenatal and maternity service, to an extent greater than is needed in the teaching and research in medicine. To demonstrate rather than to operate in such public fields would seem the wiser role.

Another matter of importance to the University in its relations to the public is its contribution of part-time service, supervision, and direction through members of its teaching staff to the work of various bureaus of the Division of Health. It is thought that it would be wiser for the University teachers to be held in an advisory capacity rather than in a financial relation as part-time employes of the city. The present relationship does not bring credit to the University although the services are of a grade which the city does not seem prepared to pay for at their true value. Any criticism of the public health service bears back upon the University teachers who share in the responsibility and in the emoluments.

CURRICULUM, INSTRUCTION AND FACULTY ORGANIZATION

Now that there is such a strong and increasingly well-informed current of public opinion in matters relating to preventive medicine and health development it would seem a particularly propitious time for the University to undertake in its Medical School, education of its medical students in their responsibilities to the public as quasi-health officers, as private practitioners and as students of the broad facts of epidemiology. There is no clinical subject, major or minor specialty, which is not susceptible of treatment to the end that preventive as well as diagnostic and therapeutic objectives may be taught in each patient. Systematic instruction in public health problems and methods is now an obligation of every medical school, which can no longer be escaped on the plea of an overcrowded curriculum.

In proposing that industrial hygiene be developed as a department of the medical school or better as a separate small school under the wing of the medical school the particular local need of Cleveland's employers for trained medical officers in their plants and the great variety of industrial hazards not at present adequately studied and guarded against in the interest of the employes, are to be particularly emphasized. It would be unwise to confuse the training of industrial physicians with the training of physicians for careers as public health administrators.

Details of a course of lectures, demonstrations and laboratory work have been given to the members of the medical faculty concerned, by the members of the Survey staff in charge of the Industrial Health Survey.

Special reasons for urging endowment for a department of industrial hygiene will be found in the section devoted to industry, Part VII. Now that orthopedic surgery and psychiatry bid fair to see special provision made for them, there remains among the major needs a special opportunity for urology under the aegis of the department of surgery.

Generous praise must be given for the quality and scope, the leadership and product of the laboratory sciences as taught by the medical faculty.

The study of physiology and functional pathology is well coordinated by special teaching in clinical study at the bedside.

While the department of anatomy has ample provision for staff and research and is particularly favored by the State laws under which a collection of material of very great value has been obtained in the course of many years of work, the fire risk of the present unsuitable quarters gives serious cause for anxiety. It is certainly unfortunate that the teaching of embryology and histology are not as well coordinated with general anatomy as are physiological chemistry and general physiology. The students do not at present get the best that the teaching staff of this department and the modern conception of anatomical teaching permit.

Full-time teaching positions for the head of the main clinical departments and for the chief assistants in clinical instruction are much to be desired and would be welcomed in the department of medicine as they have been established in the department of pediatrics.

Private practice ambitions will always run counter to the best traditions and quality of medical teaching.

There is no organization of clinical departments for staff conference, and the result is a feeling of detachment and lack of interest, particularly among those whose teaching never comes under the critical and stimulating eye of the head of the department. Policies and standards of instruction where there are several hospital services used for teaching can only be put on a sound basis by frequent departmental staff conferences. With the exception of the departments of pathology and physiology there is little, if any, contact established between teaching at the Medical School or Lakeside and the teaching at City Hospital.

With the existing active executive committee of the medical faculty to relieve that body of the burden of business detail and to be ready for quick action when need arises, there is offered an excellent opportunity to democratize and broaden the influence of the faculty and of the forces within it, by extending membership and vote to a larger proportion of the teaching staff. It is of great importance that those responsible for the various divisions of teaching meet for discussion and interchange of opinions as to general policies of the school. Although the so-called voting faculty of 24 might appear to give a broad and adequate representation, a little study of its membership shows how restricted it is.

Medical voting faculty consists of:

Votes	Members
1.....	President of the University.
2.....	Senior or emeritus professors, inactive, not teaching or in touch with the college work.
1.....	Research and elective teaching pro- fessor only.
20.....	Active in teaching.
—	
24	

Among the 20 active teachers are four who teach less than thirty-five scheduled hours a year. One associate professor in a clinical specialty has a vote but has no clinic and teaches only 16 hours a year.

If there were departmental staff organizations so that the head of a department really represented his department with full knowledge of the opinions, teaching practices and so forth, of his colleagues and assistants, even this limited group (20) would give a good working representation, but there is much irrelevancy in the assignment of voting power apparently, for while the laboratory subject of bio-chemistry with an assistant professor is not represented, otology, gynecology and genito-urinary surgery have each a vote.

There are four assistant professors who teach eighty or more hours each and yet have no voice in the faculty; not that representation should be based on the hours of teaching but that the faculty would be strengthened by the presence of men who are devoting so much of their lives to medical teaching, men whose youth and ambition is now rather a neglected asset.

The danger of clique domination by clinical interests, where the great resources of hospital and college laboratories for private advancement are available, is always to be feared in medical schools, and to meet such a possibility prompt democratization of the voting faculty is recommended.

Lack of sufficient junior assistants particularly at City Hospital forbids the thorough working up of the amazingly fertile material in clinical medicine, surgery and pediatrics. Diseases of metabolism, tuberculosis, cardiac disease and mental diseases appear to have but little consideration in the general plan of training of third and fourth year medical students.

The teaching of surgery at Lakeside is almost exclusively carried out by the paid resident house officers, the head of the department confining his field to demonstrations and operative clinics. The surgery taught at City and at St. Vincent's hospitals is not brought into any definite or constant relation in the way of subject matter or sequence with the teaching at Lakeside. There is generous provision for research in both surgery and medicine.

The teaching of obstetrics and of pediatrics in the fields of private practice and of preventive medicine is excellent. The department of pediatrics lacks adequate dispensary service for children over three. The department of obstetrics has more material than it needs for teaching purposes. If there is to be a truly modern and just division of responsibility between these specialties, the new born babe at the maternity hospital and the homes reached by the out-patient delivery service, should be turned over at once to the care of the pediatricists. A baby should not be an obstetrician's responsibility once it is separated from the mother, and the most important age from the point of view of prevention of infant mortality is precisely the period when the babe is now under the care of the obstetrician.

The Medical School lacks the attention and service for organization, development and coordination of its various departments and functions which are primarily the duty of the Dean of a professional school. The reason for this is not lack of understanding or appreciation of the problems, but the overwhelming occupation of the Dean in an absorbing and widely distributed private and hospital surgical practice, and in a considerable amount of clinical surgical instruction and demonstration. To attempt to maintain adequate direction of the intricate problems of the Medical School requires more time and undivided attention than can at present be given by the Dean. His rare and invaluable services in the field of surgical anatomy, pathology, diagnosis and operative treatment can ill be spared or his organizing ability be demanded at the expense of his professional career.

HISTORY OF THE COLLEGE AND THE DISTRIBUTION OF ITS GRADUATES

A brief summary of the important facts about the Western Reserve University Medical School and the part its graduates play in the professional life of Cleveland may properly be included here.

Organized in 1843 this school officially joined the University in 1881. In 1914 there was merged with the Medical School of Western Reserve University the Medical Department of Ohio Wesleyan University or the College of Physicians and Surgeons, itself a product of mergers of the Charity Hospital Medical College, which combined with the Medical Department of Western Reserve University in 1870, and the latter institution which merged with the College of Physicians and Surgeons in 1896.

From 1844 to 1899, the Western Reserve University School of Medicine graduated 1,085 physicians. From 1900 to 1919 it has graduated 571 physicians. There graduated in 1920, 45, and the attendance of the school during the academic year 1919-1920 was 223, divided by classes, first year 60, second year 34, third year 41, and fourth year 54. It is the policy of the school to limit its classes to fifty students. Laboratory facilities are inadequate for more.

The number of the teaching staff is 102 distributed by departments as follows:

Anatomy.....	8
Biochemistry.....	2
Physiology.....	3
Pathology.....	11
Hygiene and Bacteriology	3
Pharmacology and Therapeutics.....	4
Medicine.....	23
Pediatrics	9
Surgery	37
Obstetrics and Gynecology.....	12
	<hr/>
	112

In 10 instances teachers hold positions in two departments. At Lakeside Hospital forty teachers hold staff positions, at City Hospital twenty-three, at St. Vincent's Charity Hospital nine, and at Maternity Hospital four. These also include ten duplications. Forty per cent of the clinical teachers are Western Reserve University graduates.

The total required hours of work in the present four year course at the Western Reserve University Medical School are 5,136 hours, with electives 88 hours, or a grand total of 5,224. At Northwestern University at Chicago the total required is 4,322 hours. At the University of Michigan it is 4,545 hours, and at Leland Stanford 4,182 hours.

The following table shows the present distribution of graduates of this school in the practice of medicine in Cleveland.

WESTERN RESERVE UNIVERSITY GRADUATES REMAINING IN CLEVELAND			
Years-Group	No. of Graduates	No. Practising in Cleveland	Per Cent
1860-79	596	16	2.67
1880-89	523	38	7.26
1890-99	297	72	24.2
1900-09	239	90	37.6
1910-14	128	57	44.5
1915-19	204	58	28.4
	<hr/>	<hr/>	<hr/>
Total	1987	331	16.6

Three hundred and thirty-one or 28.3% of 1,169 physicians in Cleveland are graduates of Western Reserve University Medical School. Of the 309

al staff positions in Cleveland, 75 or 24.2% are held by Western Reserve University graduates and 31 or 10% by Western Reserve University teachers, graduates of other schools, or a total of 34.2% of hospital staff positions held by Western Reserve University graduates and teachers.

The following three tables are of considerable interest to teachers and practitioners of medicine in Cleveland.

TABLE I.*
Medical Department, Western Reserve University, Cleveland

Estimated Popula- tion of City	Classification by Council on Medical Edu- cation	No. of Stu- dents Registered	Graduates	Grads. with A. B., B. S., or Ph. B.	TOTAL FEES				Number of Teachers	Weeks in the College Year	Executive Officer	
					1st yr.	2nd yr.	3rd yr.	4th yr.				
606,938	A	94	21	18	\$130	\$130	\$130	\$130	84	34	F.C. Waite, Sec.	
60,663	A	107-64†	14	12	142	135	135	135	114	34	" "	
60,663	A	135-41†	35	29	142	135	135	135	89	34	" "	
60,663	A-	144-17†	22	21	162	155	150	155	96	34	" "	
60,663	A-	153-4†	30	30	162	153	150	155	90	33	" "	
39,431	A	169	38	37	162	155	150	155	93	34	" "	
56,975	A	178	49	49	162	155	150	155	96	34	" "	
56,975	A	165	32	32	175	160	154	155	107	34	C.A. Hamann, Dean	
74,073	A	181	46	46	175	160	154	155	111	34	" "	
74,073	A	180	41	41	175	160	154	155	110	34	" "	

The statistics were taken from the Educational numbers of the *Journal of the American Medical Association*, 1910, through 1919.

This number represents students of Cleveland College of Physicians and Surgeons (absorbed by Western Reserve University in 1910) who received instruction at Western Reserve and degree from Ohio State University.

TABLE II*.
Distribution of Medical Students at Western Reserve—By States

California	Colorado	Dist. of Colu.	Florida	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Massachusetts	Michigan	Minnesota	Mississippi	Missouri	Montana	Nebraska	New York	Ohio	Oklahoma	Pennsylvania	S. Carolina	S. Dakota	Tennessee	Texas	Utah	New Mexico	Virginia	Washington	West Virginia	Wisconsin	Foreign	TOTALS
..	..	..	..	..	1	4	2	..	..	..	1	1	1	..	..	1	..	69	..	8	1	1	..	..	..	1	..	..	1	1	1	94
..	1	..	..	..	3	5	1	1	..	..	1	1	1	..	1	1	2	139	..	8	..	..	..	..	1	..	..	..	1	1	2	171
..	..	..	..	..	3	6	2	3	1	..	2	1	1	..	1	1	2	132	1	11	2	..	..	..	1	..	..	..	3	..	2	176
1	..	..	..	..	2	5	1	2	1	1	1	1	..	1	1	1	1	114	2	16	..	..	1	..	2	..	..	..	3	1	2	161
1	..	..	..	..	3	2	3	2	1	..	1	..	..	1	1	..	2	113	2	13	..	..	1	1	3	..	..	..	4	..	3	157
..	..	..	..	..	1	2	2	2	2	..	1	..	..	..	..	..	2	121	1	13	1	1	1	1	5	..	..	..	6	1	6	169
..	1	..	1	2	2	1	1	..	1	..	..	..	..	..	..	..	2	138	..	10	1	2	1	1	6	..	..	..	5	..	3	178
..	1	1	..	2	3	2	2	..	1	..	..	..	..	..	..	..	2	130	..	8	..	2	..	..	3	..	1	..	3	..	4	165
..	1	1	..	1	3	4	2	1	1	..	..	1	..	..	..	..	1	139	..	9	..	2	..	..	3	..	1	1	4	..	6	181
..	1	1	1	..	2	3	2	1	1	..	..	..	1	..	..	..	2	136	..	11	..	1	..	..	7	..	..	..	5	1	3	180

Compiled from the *Journal of the American Medical Association*.

TABLE III.*
Medical College Graduates

Year	Non-Sectarian	Homeopathic	Eclectic	Physio-Med.	Non-descript	Total	W. R. U. Grads.	% of Total
1910	4,113	183	114	16	14	4,440	21	.5
1911	4,006	152	110	5	....	4,273	14	.3
1912	4,206	185	92	....	....	4,483	35	.8
1913	3,679	209	93	....	....	3,981	22	.6
1914	3,370	154	70	....	....	3,594	30	.8
1915	3,286	195	55	....	....	3,536	38	1.0
1916	3,274	166	78	....	....	3,518	49	1.3
1917	3,134	180	65	....	....	3,379	32	.9
1918	2,454	114	42	....	60	2,670	46	1.7
1919	2,423	89	28	....	116	2,656	41	1.5

* Statistics compiled from Table VI. page 502, *Journal of the American Medical Association*, Aug. 16 1919, and Educational Numbers of *Journal of the American Medical Association*, 1910 through 1919

The Western Reserve University Medical School is classed as A, 1907 to 1919, by the Council on Medical Education of the American Medical Association.

INSTRUCTION FOR GRADUATES

An important service undertaken by the Medical School during the summer of 1920 has been the offering of systematic instruction to medical graduates in clinical medicine and surgery, including the necessary accessory training in anatomy, pathology, laboratory aids in diagnosis, and such co-operation from teachers in various specialties as is necessary. The conception of the program is broad, the spirit of the teachers is of the finest and the fees are moderate, and there may be expected from the modest beginning of this year with a class of 23, such steady development and appreciation of the work as will go far to win generous professional support for the Medical School and its ideals. Once endowment is provided or annual support is assured for the teaching of medical undergraduates, there should be a public appeal made to support graduate teaching in the medical sciences, not alone in summer but as a necessary service for the University to provide for the profession throughout the year. Both the short courses in diagnosis and treatment such as are now being offered and courses leading to the proper training of specialists, taking one or two years of combined laboratory and hospital teaching, are urgently needed in this country.

MEDICAL PRACTICE

PHYSICIANS IN CLEVELAND CLASSIFIED BY SPECIALTY

There are 1,169 registered physicians in Cleveland, distributed according to their own statements among the different fields of practice as follows.

General.....	878
Surgery	
Surgery 87	
Orthopedic Surgery 4	91
Internal Medicine.....	16
Tuberculosis.....	10
Neurology and Psychiatry	
Neurology 3	
Psychiatry 2	
Neurology and Psychiatry 7.....	12
Obstetrics and Gynecology	
Obstetrics 14	
Gynecology 12	
Obstetrics and Gynecology 4.....	30
Pediatrics.....	23
Ophthalmology, Otology, Laryngology and Rhinology	
Ophthalmology 12	
Ophthalmology and Otology 3	
Laryngology and Rhinology 4	
Otology, Laryngology and Rhinology 21	
Ophthalmology, Otology, Laryngology and Rhinology 15.....	55
Laboratory Specialties	
Pathology 1	
Clinical Pathology 2	
Roentgenology 9	
Bacteriology 1.....	13
Anesthesia.....	3
Dermatology.....	9
Urology.....	11
Public Health.....	1
Not in practice.....	14
Retired.....	3
	<hr/>
	1,169

HOSPITAL STAFF SERVICE

Estimating the number of internes and physicians retired[or]not practising at 119 there is left a total of 1,050 physicians in active practice (one to every 758 of the population of Cleveland in 1920). Of this number 309 or 29.4% are on hospital staffs.

233	or	22.2%	are on the staff of one hospital.
55	"	5.2%	" " " " " two hospitals.
15	"	1.4%	" " " " " three "
5	"	.5%	" " " " " four "
1	"	.09%	is " " " " five " (as pathologist).

That 29.4% of all the practising physicians of Cleveland should control the opportunities of education and personal advancement afforded by 80% of the hospital beds of the city is not entirely satisfactory.

In Boston about 42% of the practising physicians enjoy hospital opportunities. In New York it was learned from a recent study that 51.6% of the registered physicians have hospital or dispensary affiliations (12.6% only dispensary affiliations, 12.8% both hospital and dispensary affiliations and 26.2% only hospital affiliations).

Of 545 physicians who have served as internes in Cleveland hospitals chiefly within the past ten years, 196 or 36% are now practising in Cleveland. These graduates who represent the best product of our present methods of medical education should be attached as soon as possible after leaving their hospital to some hospital service, at first in the dispensary or as assistants in the laboratory, but with a definite future of clinical opportunity open to them through merit and the willingness to sacrifice some immediate financial gains for the sake of a higher professional training.

PROFESSIONAL ORGANIZATIONS

Professional organization in Cleveland resembles that of other large cities and has provided the resources in the shape of library and meetings which are a necessity in a rapidly developing profession and one in which criticism by one's fellows and discussion of results and scientific reports play so important a part.

CLEVELAND ACADEMY OF MEDICINE

Previous to 1902 there were two medical societies in Cleveland: the Cleveland Medical Society and The Cuyahoga County Medical Society. In 1902 the Cleveland Academy of Medicine was formed by the union of the two societies mentioned above. The Academy membership is approximately 600. The general meetings are held once a month on the third Friday of the month in the auditorium of the Cleveland Medical Library Association. The Clinical and Pathological section meets on the first, and the Experimental medicine section on the second Friday in the month. The Eye, Ear, Nose and Throat Section has not met for some years. The

Academy is the county medical society and is the local constituent unit of the Ohio State Medical Association and of the American Medical Association.

Recently a more aggressive spirit has come over the Academy and with the services of full-time lay assistance, the officers have undertaken the publication of a bulletin and have declared their intention to interest themselves and the rest of the profession in the modern problems of health insurance and legislation of various kinds affecting the professional and economic status of physicians in Ohio.

The responsibility for the deplorable conditions which exist practically unchecked among the foreign born population, due to the exploitation of the sick and the well by quacks and patent medicine interests, rests to some degree if not chiefly with the indifference of the organized medical profession. The attention of the officers of the Academy of Medicine is directed to the report on Quacks and Patent Medicines in Relation to the Foreign Born of Cleveland, which follows at the end of this chapter.

CLEVELAND MEDICAL LIBRARY ASSOCIATION

In 1894 the Cleveland Medical Library Association was formed. Previous to this time a considerable number of books, purchased from funds contributed by the County Medical Society, had been gathered in Case Library. In 1895 a contract was entered into with Case Library. The library set aside space for the Association books and agreed to care for and bind them and, if reimbursed for the amount expended for binding, to deliver the books to the Association upon demand. In 1898, on account of lack of space, it was necessary for the Library to terminate this arrangement. After due deliberation the property now occupied by the Library at 8 Prospect Avenue was purchased by the Association. In 1906 a fire-proof stack-room and auditorium were added. In 1919 the property adjoining on the west was purchased.

The Cleveland Medical Library Association is incorporated under the Ohio laws. The management of its business affairs is in the hands of a Board of Trustees, who act through an Executive Committee. The traditional policy is the re-election of officers to ensure continuity of policy and continuity in the handling of funds. The working librarian serves on a full-time basis. The hours are 9:30 A. M. to 10 P. M. To the general public extended reading privileges. Only members are permitted to withdraw books.

According to the Librarian's report for 1919 the total number of volumes is 1,312. 847 books were loaned during the year and 1,853 visitors to the library were registered. The Library receives 166 different journals.

The Library is supported by the dues of its members—about 260 in number—and the income of invested funds, the total of the funds being what over \$270,000. The funds are handled largely by two trust companies.

The Library is restrained from combining with any other society or organization by terms of the Allen gift, the principal of which is \$200,000.

The Library which has capacity for doubling its present contents is used to only a small fraction of the needs of the profession. That less than six readers a day visited the Library and less than one book was borrowed for each medical practitioner of the city in 1919, is a commentary upon the acquisitiveness of the physicians in the field of modern medicine, and reflects also a lack of adequate advertisement and propaganda by the Library Association itself of its own resources.

The policies of the Library are liberal and its financial support sufficient to meet many more needs for medical references than seem to be felt by the profession in Cleveland.

THE CLEVELAND MEDICAL JOURNAL.

The publication of the *Cleveland Medical Journal* was discontinued during the war and has not as yet been resumed. While the *Journal* was the official organ of the Academy it had no other relation with the Academy and was owned and published by a separate corporation as a public-spirited enterprise, not for profit. The Academy contributed to the Journal, each year, \$2.00 per member. There seems to be no urgent need for the resumption of this journal at a time when every economy must be practised to permit the survival of those which serve a wider audience and offer space for most of the important contributions to medical science.

PRIVATE MEDICAL ORGANIZATIONS

There are several private medical organizations serving to some degree social and scientific needs of the profession. Among these are the Cleveland Homeopathic Medical Society which was organized in 1865 (there are at present about 150 members), the Cleveland Colored Medical Society organized in 1916 (30 members, 18 of whom are doctors, 8 dentists and 4 pharmacists), and the Cleveland Public Health Association, a branch of the American Public Health Association, organized May 21, 1919 (the membership is 45, and is limited to those who are members of the national organization).

PROFESSIONAL OPPORTUNITIES

The medical profession has suffered severely in its development in Cleveland by reason of the serious shortage of hospital beds. Visiting services which will be needed when the necessary increment of beds is added to existing hospital capacities should provide openings for most of the profession willing and trained to give a high grade of service in hospitals.

There is lacking in Cleveland that unity of spirit among the physicians which comes from a just distribution of equal opportunities and from generous support, encouragement and advancement of the young and ambitious by their seniors.

better trained group or with higher professional ideals would be hard l than the recent graduates of the local medical school. They are d to a quicker recognition, particularly those who have dedicated elves to various of the special fields of laboratory and clinical prac- nes of effort not sufficiently appreciated in Cleveland.

ccording to information obtained from those chiefly concerned general medical practice and consultation work in internal medicine, is a very unusual indifference among Cleveland physicians to the of laboratory tests in confirmation of diagnosis or as checks upon l impressions and physical findings in the cause of disease. The use tests in medical practice now available in the fields of blood chemistry immunology is practically unknown in Cleveland.

AUTOPSIES

comment which could not fail to come to the lips of any visiting ian, particularly from European medical teaching centers, would ily be that the use of the autopsy is not appreciated as, at the same the most valuable postgraduate education for hospital physicians and ns, and the cause of a respectful humility among teachers and students n the presence of the secrets of disease.

uring 1919 there were recorded 455 autopsies in the hospitals of Cleve- and it is fairly clear that autopsies are rarely performed outside of als on private patients and about as rarely, in the honest meaning of rm, under the auspices of the Coroner's office.

f the 455 recorded autopsies it will be seen from the following list 51 were performed in the hospitals where medical teaching is carried mely, at City, Lakeside, St. Vincent's and Maternity.

AUTOPSIES PERFORMED IN CLEVELAND HOSPITALS IN 1919

City.....	209 approximately
Fairview.....	0
Glenville.....	1 or 2
Grace.....	unknown
Huron Road.....	5
Lakeside.....	110
Lutheran.....	0
Maternity.....	8
Mount Sinai.....	50
Provident.....	0
St. Alexis.....	unknown
St. Ann's.....	20 orphanage children
St. Clair.....	1
St. John's.....	20
St. Luke's.....	5
St. Vincent's.....	27
Woman's.....	0
Lakewood.....	a few

Even at the hospitals where post-mortem study is urged and has its best chance in Cleveland the percentage of deaths which come to autopsy is pitifully small as can be seen from the following list.

Lakeside Hospital

Year	Deaths	Autopsies	Percentage
1914	226	85	38
1915	243	107	44
1916	284	114	40
1917	273	97	35
1918	350	64	18
1919	317	110	37

City Hospital

Year	Deaths	Autopsies	Percentage
1917	1,168	156	13
1918	1,211	202	17
1919	863	207	24

St. Vincent's Hospital

Year	Deaths	Autopsies	Percentage
1916	131	16	12
1917	182	18	10
1918	178	21	12
1919	331	16	5

The pathologists of the hospitals are well aware of the neglect of the post-mortem as an invaluable educative resource, but interest is rarely as keen among the surgeons and physicians on duty.

Public Health administration and the practice of curative medicine alike would be gainers if a post-mortem examination were required in every death occurring in the hospitals of the city. It is distinctly a duty of the Hospital Council to take a definite stand in this matter, see that hospital superintendents feel their responsibility for obtaining consent for autopsies from the family or friends of the deceased and apply this necessary control observation to the clinical and operative services of the attending staff.

No better statement as to the action it is desirable to take can be found than the following quotation from the writings of the leading pathologist of Cleveland.

"Investigations of the cause of the general shortcoming of American medicine in dying the accuracy of clinical diagnosis lead to a variety of explanations and an equality of suggestions for improvement. The latter may be thus summarized:

There should be:

1. Education of the public as to the importance of post-mortem examinations to public health.
2. Improvement of legislation: (a) obviation of the necessity for written permission to perform a necropsy, and (b) recognition of the difference between anatomic dissection and the necropsy.
3. Improvement of hospital regulations.
4. Increased development of the interest of physicians in the necropsy.
5. Encouragement of the selfish interest in post-mortems on the part of intelligent relatives of the dead.
6. Assignment, in large hospitals, of certain persons whose special duty it shall be to secure permission for post-mortem examinations.
7. Information given the family as to the conditions disclosed by the necropsy.
8. A request for necropsy in every fatal case in hospital or private practice.
9. Establishment in the hospitals of regular clinical pathologic conferences.

We would suggest, in addition, that the subject is of direct importance to the development of industrial medicine and that those interesting themselves in this subject point it to the employers and employes the value to medicine and industry of post-mortem examinations. The suggested alteration of actuarial figures regarding life insurance is of similar importance to the so-called health insurance."

RECOMMENDATIONS

It is recommended that:

1. New trustees who are still in the midst of the actual problems of industry, of the professions and of public service, be added to the present number of trustees or be appointed when the terms of those trustees now serving expire.
2. One or more trustees, chosen by the alumni of the Medical School from their own number, be elected to the Board.
3. Medical School buildings be erected at a site which will permit of convenient contact between the medical faculty and the faculties of the other University schools.
4. In addition to its control of the exceptionally abundant facilities of the City Hospital for the teaching of clinical medicine to undergraduates, the University Medical School maintain such affiliations as it now has with Lakeside, Maternity and Babies'

Hospital, permitting medical research and study in methods of teaching which can hardly be carried out with such entire liberty in an institution of the public nature of City Hospital, where political and financial difficulties may interfere occasionally with the best interests of scientific medical teaching and study.

5. The trustees discontinue formal affiliations for the Medical School with other hospitals than the City Hospital and the three included in the University group, so far as systematic teaching activities are concerned.

6. At the same time that the project for Medical School buildings is undertaken the trustees prepare a plan for financial support, either by endowment or through annual pledges, which will adequately provide for the salaries of the teachers and the maintenance and service needs of each department of the Medical School.

7. The trustees of the University devote their best efforts to obtain such changes in the City Charter as may be found practicable and such action from the officers of the city government as may be necessary to insure the appointment of a board of trustees to be responsible for the administration of the City Hospital, such trustees to be selected from representative groups of citizens by the Mayor and to be appointed by him.

8. The building of the new hospital group, either as one construction undertaking (if ample funds are available) or in sequence (in the following order of preference—Babies' Hospital, Maternity Hospital and Lakeside Hospital) be commenced when the construction of Medical School buildings, the provision of endowment or adequate annual support for teaching and the removal of City Hospital from the probability of political mismanagement have been assured, or at least have been so planned for that their accomplishment will parallel, if not precede, the group hospital construction.

9. Neither funds nor the energies of University teachers or institutions be devoted to the operation of public facilities and medical services, except in so far as these can be made to contribute or are found necessary for the teaching and study of the medical sciences.

10. The University discourage the employment of its officers on a part-time basis in positions under the city government.

11. Systematic instruction in the problems and principles of preventive medicine be included in the curriculum of undergraduate students without necessarily adding a new department or increasing the number of hours of instruction now given to medical students.

12. A department for the training of physicians in the field of industrial medicine be established as soon as adequate funds can be provided, this department and its functions not to be confused with such efforts as the University may undertake for the training of physicians and others for the career of public health administrators.

13. The trustees push forward vigorously with the present plans for a department of orthopedics, under the general department of surgery, but free to develop its own teaching and research policies, with clinical facilities independent of those of general surgery.

14. A department of psychiatry with a similar independence under the general department of medicine be organized and provided with independent clinical facilities.

15. A department of urology be added to the independent special departments under the department of surgery.

16. The extension of the principle of full-time teaching positions for the heads of the main clinical departments and for the chief assistants be undertaken as soon as salaries can be assured, adequate to attract trained teachers and to permit of their having ample time for research.

17. The medical faculty adopt the policy of having staff conferences in each department to provide for uniform teaching policies and practice in the various clinical hospital services used by these departments.

18. The voting faculty of the Medical School drop its inactive and absentee members and add not less than ten more members of the teaching staff, assistant professors, demonstrators and others, in order to make of this body a real academic forum, democratic in nature, and permitting a much broader representation from those carrying the major burden of the teaching work.

19. To the Department of Pediatrics be assigned the responsibility and care for new-born babies at the Maternity Hospital and in the maternity service of the City Hospital.

20. The trustees of the University encourage and give their active support to the new undertaking of the medical faculty in the field of medical education for graduate physicians.

21. The Hospital Council take an active interest in increasing the performance of post-mortem examinations for the sake of improving the quality of medical and surgical services in the hospitals.

Quacks and Patent Medicines

By MARY STRONG BURNS

THERE are many perils in being an immigrant in Cleveland, but one of the most disastrous to his pocket, health and native faith is the quack medical practitioner. With an estimated 513,000 of the city's 731,156 population either of foreign birth or foreign parentage in 1917, we have abundant opportunity to realize that it is not possible for the foreign-born with limited education and no English to pass unscathed through a labyrinth of new customs—good, bad and indifferent.

The doctor, as popularly conceived by the uneducated, is a mystery at best, something of a magician from whom the patient dares expect only a small part of the truth and no explanation of it. The immigrant learns that the reputable doctor of medicine must have "M. D." after his name (even though it means as little to the immigrant as to the street gamin who "guessed it meant More Dope"), and when he pauses before an office door placarded "M. T. D., D. C., D. S. T., Ph. C." he may be forgiven for imagining that he stands before an even greater "Professor" than the law requires. He finds as wide a choice of doctors as of religions, and as he hesitates, bewildered, the more watchful and aggressive forces find him.

Of these the quack doctors are most successful because they set forth in that particular foreign language newspaper which the immigrant reads as the one intelligible guide to his new country, a convincing statement of skill, learning and sympathy, promising (with reservations so deftly inserted as to be almost unnoticeable) health free or at minimum cost. Even though the immigrant feels well and in no need of medical care the quack's repeated message and the long list of "troubles and diseases" is ever present and suggestive, so that the susceptible imagination of the future victim is soon won over to a conviction of some bodily frailty. The quack, at the first examination, finds more serious ailments, the "cure" of which will generally necessitate an expenditure to the limit of the patient's resources and large enough to include the high cost of advertising.

The foreign language newspapers derive from 30 per cent to 60 percent of their advertising income from the fraudulent statements of quack practitioners and patent medicine interests. It has been conservatively estimated that the Italian paper *Il Progresso* and the Polish paper *Ameryka Echo* circulated here derive 60 per cent of their income from these sources. In one of these, one advertisement of "Parto-Glory," containing 723 words, cost about \$125.

There are twenty-one newspapers not printed in English circulated in Cleveland, published locally. These are mostly papers of national circulation. There are also eleven foreign language papers. Taking all together, twelve different languages are used: Bohemian, German, Greek, Hungarian, Italian, Lithuanian, Polish, Roumanian, Slovak, Slovenian, Swedish and Ukrainian. The papers published here, with the exception of three, carry

only advertisements of physicians and medical agencies doing business from Cleveland office, and nearly one-third of their advertising income is derived from this source. The papers published out of town but circulated in Cleveland are: four published in New York and one each in Chicago, Detroit, Jersey City, Middletown, Pa.; Pittsburgh, and Toledo. These do not contain advertisements of Cleveland quacks, although they are not limited to local advertising. They do, however, contain advertisements of 62 quack doctors from other cities, and of these only two from Detroit are duplicated in the list of out-of-town quacks who advertise in the foreign language papers published in Cleveland.

Of the 25 physicians having offices in town and advertising in the Cleveland foreign language newspapers, one uses papers in six languages, one, four languages, three, two languages and twenty, one language. Thirteen of these physicians advertise only their address and office hours. This is an admittedly ethical and legitimate procedure among foreigners. The doctor may thus announce his presence to people of his own race. Because of this precedent the quack practitioner may use a more elaborate form without arousing suspicion, the foreign-born reader often getting the idea that the newspaper itself is setting forth the doctor's skill and goodness. Thus eight of the twenty-five physicians advertised to treat at their offices "all sicknesses of men and women, especially sicknesses of the blood, heart, kidneys, lungs, nerves, nose and throat;" two treat "blood and skin diseases," and two others treat "men only," evading a more open reference to venereal disease.

In this class is the type of office whose apparent head, the quack doctor, is under the control of an unscrupulous business syndicate. This syndicate manages offices in a number of large cities, guaranteeing salaries and a certain percentage to the doctor in charge, but claiming the fees of the patients. In one of these offices in Cleveland when business was interrupted by arrest, the receipts for the year were found to have amounted to \$40,000. If illegal practice is detected the business manager of the syndicate appears, pays the fines, closes the office and spirits his doctor away to an office in another city where a new name and locality will make him more valuable than ever. After the affair has slipped out of the public mind, the syndicate opens its Cleveland office at a different address and in charge of a new agent and the game begins again. The agent of the syndicate may or may not be a licensed practitioner. He may have had his license revoked in another state. In any case his medical knowledge is less in demand than his skill at getting a cash return for any imitation of it. If a license is necessary to avoid suspicion and the agent does not possess one, some unsuccessful, though once ethical, practitioner is lured into the game on the promise of a small regular salary, and when the crash comes he is usually left to be the scapegoat and serve the sentence.

The eight out-of-town physicians advertising in foreign language papers published in Cleveland have offices as follows: one in Akron, one in Chicago, three in Detroit, one in Paterson, N. J.; one in Syracuse, N. Y. A private clinic in New York advertises in a German paper. The Hungarian paper published the notices of the Paterson and Syracuse doctors and of two from

Detroit; the Roumanian those of Akron and Chicago doctors, and one from Detroit. The advertisements of these out-of-town physicians show that five would treat "all troubles," one will treat "men only," one "rheumatism and kidney troubles," and one chronic diseases. One states that he will send medicines and advice; one offers a book, *The Friend of Youth*; one declares "Hundreds travel to see me, no treatment through letters;" another invites, "Come, or ask advice."

The appeal of the quack is effectively adapted to the susceptible foreign temperament. In the picturesque phraseology of his own tongue the reader is tempted, cajoled, lured, warned and roused to fear; trading on his natural credulity, the wording of the advertisement is carefully managed so as to imply, rather than guarantee, a cure. The appeal of money saving is most frequent. "My advice is free;" "I will help you with the best medical care for such price as you can pay;" "I do not charge for examination if you are one of my patients;" "X-Ray examinations only \$1;" "Pay after you are cured." This type of appeal is in constant use. Other types are here set down.

The appeal of encouragement: "No matter what illness you have if you have failed to find health from others, come to me;" "With success I have cured many. What I have done for others I can do for you;" "Men and women my specialty."

The appeal of fear, urging to prompt action: "Remember that neglecting your trouble makes it worse;" "I have saved hundreds from the operating table."

The appeal through promise of a common language: "You can hold conversation with me in your own tongue;" "Come to me and be well informed about your sickness and understand how you can be cured;" "Here we speak Hungarian;" "We speak Polish," etc.

The appeal of race: One florid description of sundry abilities is headed: "To my sick Roumanian Brothers;" "To my sick Lithuanian Brothers"—the nationality mentioned changing with the language of the paper. Another who still practises in spite of past fines and sentences uses this subtle method, "A message to the Italians. Sick Italians, do not be discouraged. Thousands of our countrymen have found health and happiness by going to see Dr. Landis. His treatments are simply marvelous!"

The appeal of special skill and "method cures": "I use X-Ray and electrical machines and my own new methods of treatment. By these methods you will recover health in the quickest possible time;" "To save the stomach my practice is to inject the medicine directly into the arteries, which hastens considerably the process of restoring to health."

The appeal to the imagination: "Formerly doctor to the Czar;" "A Polish doctor returned from U. S. Army Service in France. Come and place your confidence in me."

The appeal to sentiment: "If you are well yourself, yet there are some who need help. Send us the names of others who are sick and save them while there is a chance."

The type of appeal is more vivid and dramatic in Italian, Polish and Hungarian papers; while that in Swedish, Lithuanian and German is more matter-of-fact.

No fake advertising was found in the Greek paper, *Atlantis*.

In addition to the appeal of the quack, the foreign language press abounds in advertisements of patent, or more properly, proprietary medicines offered by "medical institutes," "medical companies," drug manufacturers and retail drug stores. These usually claim in the newspapers to be remarkable cures for almost every disease that one may have, while the label on the bottle is more modest since that must conform to the food and drug act. This act, known as the "Pure Food Law," is supposed by many to be a seal of perfection, whereas it merely insists that the manufacturer shall make no false or misleading statement on the label of the bottle as to its contents or curative power. It does not affect products made and sold within the state. It prohibits the use of certain dangerous drugs unless their presence is declared, yet allows other dangerous drugs to be used and not declared. While the label must tell the truth the advertiser need not be so punctilious and in his hands the patent medicine takes on new powers. Some of the advertisements ask the patient to send by mail to the factory for medicine. Others would send medicine and instructions for treatment by mail. Still others announce that their product may be bought anywhere. The Roman Medicine Company announces, "Our institution is under the supervision of well-known medics from the old country. It was established to relieve our countrymen of their sufferings. After years of labor and research we discovered what is indispensable to cure our brothers of their sickness. Put a cross (X) on the illness from which you are suffering and send it to us. We will serve you free of charge with every necessity." Here follows a tempting array of "troubles," minor ailments and pains. One has only to choose.

In addition to these perils by newspaper there are also perils by propaganda. Cards of reputable physicians have been sent out with prescriptions by retail druggists who implied that the doctor was also endorsing the sample of patent medicine enclosed. Recently a young woman, whose dress and manner suggested that of a public health nurse, was found visiting in the homes of women with families. She came ostensibly to advise them on the care of children and ended by selling a book in which patent medicines from several large wholesale houses were repeatedly recommended for treatment. These wholesale manufacturers of patent medicines employ clever lawyers at high salaries to protect their interests. If the preparation comes into disrepute under one name it may be used under another. Tan-lac has had several names. As a Dr. Cooper's Medical Discovery it was sold by a man in sky-blue uniform with buttons of five-dollar gold pieces, who drove through the country in an automobile.

The Ohio State Medical Board is the instrument upon which Cleveland has relied for the detection of its quacks. There is only one state medical inspector for a city of nearly 800,000 people. This is obviously too great a task for one person. The State Medical Board publishes no report except for the Governor and the Secretary of State, on July 1st of each year. The following statement was submitted to us by the Board:

From July 1, 1918, to June 30, 1919, certificates of four physicians and surgeons to practise medicine were revoked; one certificate suspended and certificate of one limited practitioner revoked; nine applications for revocation are pending; 8 midwives were prosecuted and convicted; one acquitted.

One hundred and sixty-three cases investigated; 28 convictions secured; 3 cases acquitted.

There were two dismissals and one disagreement.

Fifteen against whom charges were filed agreed to cease practice.

Fifteen more left the state.

Forty cases were pending on June 30, 1919; a number of these pending cases have since been tried and conviction secured.

The state medical inspector for the city offered an informal account of her work, all records having been sent to Columbus as made, to await the compiling of the annual report in July. There have been a number of convictions of doctors and midwives for illegal practice and criminal abortion, and other cases are being prosecuted. The work is evidently being done conscientiously and is as far-reaching as the efforts of one inspector can reasonably make it. However, a judicious and wider publicity of the accomplishment of the State Medical Board might be of distinct educational value in the community. The patient victimized by the quack does not realize that his plight is the concern of anyone other than himself.

It is difficult to state how large a number of Cleveland patients are treated through the mails by out-of-town quacks, but as practically every fraudulent scheme depends upon the mails at some time or other in its development, we are safe in believing that the Federal Authorities have not received complaints from all those who have been defrauded.

The Federal Fraud Order Law, in use since 1914, gives the Post Office Department authority to close the mails to anyone using the mails in schemes to defraud. This may be an enormously effective weapon against quacks doing a large mail-order business. The post office collects evidence enough to be sure of conviction, then issues the Fraud Order. The quack, if he has not already vanished, has a right to refer to the court, but a reversed judgment has never been recorded. In a word, the Federal Post Office will only attempt cases which it is sure of convicting. This law is also sharply limited because the Post Office Department cannot move until the mails have been actually used in an attempt to commit fraud. It must wait until it receives a complaint from someone who has been defrauded.

The quack advertiser has purposely shaped his proposition to come within the letter of the law and to so avoid the attention of the Federal eye as long as possible. He knows his own danger and at the first symptom of detection collects his bounty and "skips the country," leaving the evidence powerless to convict and his victims without redress.

The Fraud Order Law has proved a radical cure for the cases in which it has been utilized, but the number of these is small. Its scope should be enlarged and its scheme of inspection made to include those who advertise with intention to defraud, for in this matter prevention is both education and cure. The value of this law depends largely not on its passive acceptance but on its aggressive enforcement. The patient who has been the victim should not be expected to make the complaint. There should be some unbiassed agency or group of agencies combining the knowledge of the Bureau of Immigration, State Medical Board and National Vigilance Committee of Advertising Clubs to receive the complaint and present the case to the Federal Authorities. Such an agency or bureau possibly and properly operating under the auspices of the Cleveland Academy of Medicine, could be of untold benefit to the many cases of venereal disease who have so often become the prey of quack practitioners through lack of sufficient provision for treatment at hospitals and dispensaries. It could also furnish evidence of the need of further legislation to restrict the use of the mails from carrying advertisements relating to venereal disease.

The American Medical Association has prepared and published a series of pamphlets on nostrums and quackery for the use of the public. These have a limited circulation among those who least need their warning. With discriminating field work this circulation could be increased. The priest, whose congregations have had sad experiences, the large industrial plants and their public health nurses, the libraries and popular magazines could be used to good effect. The emphasis in such education might be placed first upon the hallmarks of honest, intelligent treatment of disease, and second upon the fact that each one must stop—look—listen and then think for himself before he trusts.

Assuming the theory that the Academy of Medicine must not take any action on quack behavior, we might urge that dispensaries and prophylactic centers should feel free to teach as well as to practise the ethics of medical service, supplementing the mysteries of diagnosis and technic with a program of cheerful consideration for the patient and of eliminating the difficulty of an alien language by sympathetic and patient interpreters who are not too highly intellectualized to miss the human side in the medical interest of a case.

The Americanization Committee of the Cleveland Bar Association has already become interested in the dealings of shyster lawyers with the foreign-born. This interest could be stimulated to secure valuable cooperation from the court when quack practitioners are being prosecuted and defended with unprincipled skill by their shyster lawyers.

The foreign-language newspapers cannot afford to give up their bad types of advertising unless they can get something equally remunerative to replace it. One small foreign-language paper refused quack and patent-medicine advertising to an amount of \$1,500 a month because its people were being exploited and victimized. As a result it could barely pay expenses, but the editor declared he "felt at peace without stained money." It has, however, gradually resumed much of what it once refused—an instance of "the heroic for earth too hard."

The American Association of Foreign-Language Newspapers was recently reorganized under the leadership of well known business men, one of its stated purposes being to improve the advertising in the foreign-language press of this country. They are pointing out to American advertisers the possibilities of the foreign-language paper as a medium for reaching new readers. In conjunction with the Better Business Association of the Cleveland Advertising Club, this may be of assistance, providing the foreign-language papers do not have to surrender the control of their individual policy. The large foreign-born population is too valuable a field to be neglected by advertisers. The foreign-language press might offer to the future citizen the stimulus of the best the country affords of resources and responsibilities. At present its misuse amounts to almost a civic disaster.

Should we be better satisfied to receive the immigrant who comes to our shores suspicious, distrustful, prepared to be duped and tricked both by Americans and fellow countrymen—who have had a chance to learn the ways of the country? Can we not look upon this "ignorance, gullibility, child-like credulity," or whatever we call his eager belief and wonder at our world, as something worth saving, precious because readily convertible into citizenship as loyal and even more fervid and spontaneous than our native New Englander, Texan or Rocky Mountaineer will feel free to express.

The quack has conquered where the ethical practitioner has failed to attract, because the quack has taken the "infinite pains" of a genius to win his prey. As commercialist and practical psychologist he is an expert. The clean honesty of the ethical practitioner is not equally painstaking. It should not be asked of the ethical practitioner that he cope with quackery, but because he is pledged as his "brother's keeper," shall he not note in the successful appeal of the quack to his patient the things which are promised along with the cure—friendly consideration as a stranger, a sympathetic hearing and a frank diagnosis explained so as to be understood? These are of value whether the cure comes or not, for to the imaginative foreign temperament a serious illness sympathetically interpreted by the doctor is less appalling than some trivial indisposition left unexplained. Is it not possible to have some more flexible attitude on the part of the medical profession and some more aggressive attitude for ourselves as the public in the matter? Our health regulations no longer permit people to expose themselves unnecessarily to contagion. Is the menace of quackery to be ignored? We see in our midst a multitude of people from other worlds being fed with tales in their native tongue of fake cures by fake operators. We watch and think "It will be bitter bread for them." The doctors watch and think "It is all

wrong but we may not speak." The foreign-language newspaper counts its advertising cash returns and prints on, thinking "The National Vigilance Committee of the Associated Advertising Clubs of the World allows it, the city of Cleveland allows it, the public does nothing, the income justifies it."

Only the future warns: "The immigrant's instinct for belief in his new country is a tremendous asset to the nation and to the city of his choice. The opportunity of justifying this belief and for providing education and citizenship is open to the foreign language newspaper. It is the written word, the organ of authority, but those who control its policy are in turn controlled by larger business interests and these are prostituting its high office for commercial gain. Let the city waken and protect its right."

TRANSLATIONS OF ADVERTISEMENTS SHOWN IN FACSIMILE ON PAGE 680

1. "TO MY SICK HUNGARIAN BROTHERS"

If you have failed to find help, come to me, as I have practised many years and can give health with treatments to such men and women as are nervous or ill with complicated sickness, suffering because someone has given the wrong treatment or neglected it. With success I have cured such sick who could not get cured elsewhere. What I have done with others, I can do with you. Don't spend more time but come to me today. Advice free.

If you suffer with chronic nervousness, blood, skin, or complicated trouble, or abdomen, stomach and liver trouble, rheumatism, back or muscles, headache, constipation, dizziness, eruptions, disease of the head, throat, nose—visit me. I have succeeded with such sicknesses by treatment. Respectfully I will give you my opinion and after a good examination will tell you what I can do. Get advice from me now as waiting is often dangerous. Don't forget that advice is free.

Office hours from 9 a. m. to 8 p. m.—Sunday from 10 a. m. to 2 p. m.

Dr. Kenealy,

647 Euclid Ave., 2nd Floor, Cleveland, Ohio.

Over New Idea Bakery

Republic Building

Next Door Star Theater"

*Translation of advertisement in Hungarian published in Szabadsag.

2. "CHRONIC AND NERVE DISEASES CURED"

If you are afflicted with an upset stomach or kidneys or bladder, consult me today. Seek help where it can be found. Years of experience in the treatment of all nervous ailments, either chronic or complicated, have enabled me to give you scientific electrical treatments that will help you in cases where other methods have failed, and therefore many have been freed from torture and danger of an operation. Remember: that delay and improper treatments are dangerous. Come to me if you wish to have the services of an expert specialist.

Dr. Lewis, Specialist

Office hours: 9 a. m. to 8 p. m.—Sundays 10 a. m. to 2 p. m.

749 Sixth Avenue (between 42nd and 43rd Streets), New York City."

*Translation advertisement in Italian published in Il Progresso.

3. "A MESSAGE TO THE ITALIANS!*

Sick Italians, do not be discouraged if you have not been able to obtain the desired cure even after having been visited by different doctors, or been in many hospitals.

Hundreds, or rather thousands, of our countrymen have found health and happiness by going to see Dr. Landis. Dr. Landis with his 25 years of practice in New York, having studied in the greatest universities and hospitals of America and Europe, is just the man who will put you on the road to health. His treatments are really wonderful. His office is equipped with the most costly electrical machinery, which cannot be found at all doctors' offices and which is indispensable for an efficient cure.

Dr. Landis has experimented with a method cure of electricity which has given wonderful results and which allows individuals to get well without having to leave their work.

If you suffer with pains in your back, or rheumatism, or sickness of the chest or bladder, with weakness or anemia or any other illness, be it chronic or recent, consult Dr. Landis and you will certainly find a sure cure. All consultations are absolutely free. Remember that in any sickness to wait is always dangerous. Why wait? Go this very day. Italian is spoken.

Dr. Leonardo Landis, 140 East 22nd Street, New York City.

(Between 3rd and Lexington Aves.)

Office hours: Every day from 10 a. m. to 7 p. m. Sunday from 10 a. m. to 1 p. m."

*Translation of advertisement in Italian published in Il Progresso.

4.

"X-Ray examination \$1.00.*

If you are sick, notwithstanding what the nature of your sickness is, if you are discouraged, do not give up hope but come to me.

I treat all sicknesses of men and women and especially sicknesses of the blood, skin, stomach, kidneys, lungs, nerves, heart, nose and throat by the assistance of X-Ray and electrical machines and my new methods of treatments. By these methods you will recover your health in the quickest possible time.

I do not guess. The secret of my success lies in the careful research as to the cause of your sickness. I use X-Ray, microscope and chemical analysis and also all learned methods to find the cause of the sickness.

If you are bruised or injured, come to me and I will help you.

My personal observation of the methods used in European clinics in Berlin, London, Vienna, Paris and Rome in my 20 years' experience with sicknesses that have grown old among men and women, gave me results that proved a success.

I consider 606 and 914 great medicines for the blood.

All treatments are absolutely painless.

*Translation of advertisement in Polish published in Polonea W. Ameryce.

You can depend on an honest opinion, honest treatment, and the best treatments at the lowest prices that everyone can afford.

If your sickness cannot be cured I will tell you. If it can be cured I will cure it in the quickest possible time.

We talk in Polish and Slovak.

Doctor Bailey, Specialist, 5511 Euclid Avenue, near East 55th Street.

Office hours 9:30 a. m. to 8 p. m."

RECOMMENDATIONS

1. Legislation:

(a) A more aggressive use and increased scope of the Federal Fraud Order Law.

(b) A uniform Medical Practice Act between states, to be urged by the Cleveland Academy of Medicine.

2. Administration:

(a) A Local Bureau organized to receive and act on complaints of medical fraud. This Bureau would make known its function to the public and to all Public Health agencies, who in turn would report such cases.

(b) Increased Inspection and prosecution by the State Medical Board.

(c) Development of the Americanization Committee of the Cleveland Bar Association for cooperation in prosecution.

3. Education:

(a) Extended instruction in the ethics of medical service among medical students, and also to patients in hospitals, dispensaries, health centers etc.

(b) General health education in popular courses (in a foreign language when necessary) in citizenship classes, industrial plants, churches, community centers etc.

4. Standardization of Foreign-Language Press:

Fraudulent advertising to be replaced by advertising and general reading matter of good standard, through the assistance and supervision of the Chamber of Commerce, the Cleveland Advertising Club and other civic bodies, for the protection and education of the foreign-born during his transition from immigrant to citizen.

5. Counteraction:

Giving all would-be patients first-aid treatment of psychology and self-control.

Democratizing the highest types of medical service so that the best shall be available for all.

Dentistry in Cleveland

By HAVEN EMERSON, M. D.

ASIDE from or rather in addition to the persistent forces which tend to drive any profession onward and upward in public esteem, the dental profession in this country has been advanced in its own conception of service and in its scientific application of prevention and treatment of disease by two movements of much importance. The demonstration of the benefits of oral hygiene and periodic cleansing of the teeth of children by Dr. Fones, of Bridgeport, Conn., and the proof of casual relationship between focal infection in root canals and other dental lesions and a multitude of secondary joint, cardiac and general constitutional symptoms may be said to have dominated much of the modern crusade for better dentistry, for preventive dentistry and for the close professional cooperation between dentistry and medicine in private, hospital and public health work.

In all of this Cleveland dentists have taken an active and leading part and the city is fortunate in having within its limits those who direct the fortunes of the Dental College, the Research Laboratory, the Cleveland Dental Society and the Cleveland Mouth Hygiene Association.

According to the best information there are about 550 registered dentists in Cleveland, of whom 290 are members of the Cleveland Dental Society, which is the local professional body, a constituent of the state and national dental societies.

If the Ohio Dental Practice Act required an annual registration of all dentists, as is the case in several other states, an accurate statement of the number of dentists legally practising dentistry in Cleveland could be made. The better control of illegal practice which such law permits has proved to be of great value to the profession and to the public, in New York State among others.

The private practice of dentistry in Cleveland presents no abuses or inadequacies except such as arise from the selfishness and ignorance of an occasional practitioner who fails to measure up to the present day standards of his profession. The well-to-do and those of moderate means can obtain adequate dental care without excessive expense and of a high grade whether for preventive or reparative purposes.

From the reports of the highest type of supervising dental officers in the army during the war, it was found that well over 75% of the crown and bridge and root canal filling was done so poorly as to develop or permit the development of pus pockets with all the dangers of secondary low grade sepsis and its numerous sequelae. Mechanical dentistry, done for a price instead of aseptic technic used in the spirit of modern surgical science, seems to be at least as much of a cause of disease as the neglect of oral and dental hygiene by the poor and ignorant.

There are quacks and commercial low grade practitioners in this as in the medical profession, because there is often more money in such methods

for the illegitimate and irresponsible than in a professionally conducted office. The Jews of the Woodland Avenue region suffer particularly from the services of dental quacks.

Free dental work in Cleveland is supplied at six public schools, at three health centers and at one hospital (City Hospital). There are ten chairs in use and 156 clinic hours a week, or a total of 6,900 hours a year of service offered. The work is mostly for children and for hospital out-patients. A dental dispensary used for teaching purposes, operating 80 chairs, is maintained on a more than self-supporting basis by the Dental College. The fees charged are similar to those charged by beginning dental practitioners.

In Boston five institutions offer either free or at-cost dental services with a total of 247 chairs used for 5,956 hours a week and 309,712 hours a year. In the city of Rochester, N. Y., there are 38 chairs almost exclusively for children's work.

The six school dental dispensaries are supported by the taxpayer's money through the Board of Education. Each unit includes a dentist and an assistant and is open five days a week for three hours at each session and for 40 weeks a year. Children are referred from among school children by the school medical inspectors and nurses. The extent to which the work has grown and the range of service given is seen in the following table:

	1917 Total	1918 Total	1919 Total
Patients.....	1,969	3,473	4,421
Visits.....	4,454	6,411	6,976
Emergency.....	651	1,267	1,621
Prophylaxis.....	383	661	1,196
Amalgam.....	839	1,654	3,165
Deciduous extraction.....	1,608	1,927	3,911
Permanent extraction.....	142	56	18
Surgery referred.....	192	15	183
Oxyphosphate of copper.....	127	670	1,399
Oxyphosphate of zinc.....	112	115	61
Arsenic.....	126	61	5
Roots filled.....	188	87	5
Abscess treatment.....	109	136	67

The three mouth hygiene dispensaries operated by the Cleveland Mouth Hygiene Association at three of the health centers are operated for fifty weeks of the year, five days a week and three hours at each session. The outfit and personnel of each is the same as that provided for the school dental clinics. The cost of these is met from the Community Fund as a part of the budget presented by the Welfare Federation.

A dental surgery open a half day (of three hours) a week for out-patients needing operative relief and extractions, and six half days (of three hours

each) a week for the hospital patients is provided by the city at City Hospital.*

At the College of Dentistry of Western Reserve University a public dental clinic is operated for all kinds of dental work. This is more than supported by the charges made, which are not very different from charges of beginning practitioners with a clientele of mechanics, clerks and small trades people. The lack of adequate bookkeeping prevents any statement of the margin of profit earned by this dental dispensary. The profit of \$24,000 indicated in the last annual report of the University is obviously erroneous as nothing is charged for building or upkeep, depreciation, light, heat and so forth or for the overhead cost of teachers and supervisors.

Self-supporting public pay clinics, operated under strict professional control as to services and prices, are needed and would meet a real demand for those of moderate means.

Dental care for the poor is limited largely to extraction and remedy of gross pathological conditions causing obvious inconvenience or pain. Lack of knowledge of the needs and possibilities of oral hygiene is responsible for the neglected teeth of most dispensary patients. Dental clinics where a small fee is charged are badly needed in the congested districts.

It is admitted that if all who needed dental care applied to existing dentists for treatment, there would not be enough dentists to do the work on a basis and with the facilities of private practice.

The three Mouth Hygiene dispensaries, operated five half days per week, are the only available and acceptable service (except the private dental practitioner) for thirty to thirty-five thousand parochial school children. Fifteen Mouth Hygiene units, each composed of a dentist, a dental hygienist and an assistant, operated eleven half days per week, would serve this group of children quite well; i. e., would provide the prophylactic service necessary for eighty-five or ninety per cent of these children and would provide for from one-third to one-half of the repair service necessary.

The public schools of Cleveland should increase their present equipment from six dispensaries operated five half days per week to thirty-five Mouth Hygiene units operated eleven half days per week, which would care quite well for seventy or seventy-five thousand children.

The amount of surgical service under anaesthesia required would be increased by the fifteen Mouth Hygiene units above referred to, to the extent that probably five half-day clinics will be required every week at the City Hospital. Should the Board of Education undertake to solve their problem as above suggested fully double the amount of surgical service will be required in addition. Attention should be called to the fact that after a very few years the surgical service will undoubtedly decrease, for if the Mouth Hygiene movement is of real value there should be little demand for the surgical service for school children after the first seven years. It would be desirable to have three hospitals suitably located provide for the surgical dental service.

*A full-time resident dental surgeon has been placed on duty now, and the clinic is open all day, seven days a week.

We suggest that this service could well be united with the nose and throat service as the equipment in many respects is similar.

All the groups with whom the Survey staff have come in contact, such as visiting nurses, charity and social agencies, settlement houses and the foreign-born have emphasized the inadequacy of dental service in Cleveland. When it is seen that almost as much public dental dispensary service is provided in Boston in a week as in Cleveland in a year, the reason for complaint is plain.

It would be wholly superfluous to offer arguments for the need of mouth hygiene among the children in the public or parochial schools. The matter is amply argued by records of the incidence of dental defects in the office of the bureau of School Medical Inspection and by the record of accomplishment a few years ago at the Marion School.

Dispensary dental work in every case has fallen short of its possibilities where there has been either no supervision, or supervision by unpaid or underpaid men. The service in Rochester would never have been a success without Dr. Burkhart, or his like, as a leader; nor would the service in Boston have been a success without Dr. Cross, or one of his kind, at the head. In the same way the work in Cleveland will not be a success if we expect to secure as a leader in this work a man at \$3,300.00 a year, nor can the work be carried on much longer without paid supervision.

DENTAL SERVICE IN HOSPITALS

It is accepted in many hospitals of many cities that the professional staff is incomplete without dental surgery represented and sharing in staff responsibilities. A dentist should be appointed on the attending staff of every one of the larger general hospitals of Cleveland, with a definite service in wards and dispensary.

The hospitals and other institutions in Cleveland now providing some dental surgery for patients are as follows:

MOUNT SINAI HOSPITAL

There are on the staff of Mount Sinai Hospital two dental consultants. Dental and Oral Surgery is the only service provided. Such cases as seriously need prophylaxis are sent to the Dental College. The Dental and Oral Surgery dispensary is open from 8:30 to 10:00 A. M. on each Monday and Thursday. The Dental and Oral Surgeons, being members of the staff, enjoy the privilege of operating upon private patients at the hospital, for which they may receive fees as in all departments of the hospital; however, no compensation is received by the dentists from dispensary or open ward patients. The present dispensary facilities are one dental chair with the necessary equipment, located in the annex where, with the present staff and time (two mornings per week), about eight hundred cases per annum may be cared for. Cases are admitted for dental surgery only. The hospital

plans the enlarging of this service in the near future, together with the addition of prophylactic service. There is no opportunity to develop a purely dental oral surgery service for out-patients at the present time.

CLEVELAND CITY HOSPITAL

The City Hospital maintains a dental surgery department, the operating room being situated in an amphitheater in the female division on the ground floor of the main building. The outfit consists of one operating chair, various nitrous oxide machines and a fair equipment of instruments for dental oral surgery, together with instruments for other forms of dental service that are likely to be necessary in the care of the regular hospital patients. The staff of the City Hospital consists of a Visiting Dental Surgeon, a Visiting Dental Anaesthetist, a Resident Dental Surgeon, temporarily spending half time; and one or two nurses assigned to the service as needed. Out-patient service for dental oral surgery is rendered on each Friday from 1 to 4 P. M. An average of fifteen extraction cases are cared for each afternoon. During the past two years some fifteen hundred anaesthesias have been administered. This service is inadequate in volume and should be increased at the earliest possible time. The most reasonable and economic manner of increasing the service in the present building will be by providing two or more separate operating rooms (adjacent but entirely separate) and each having its own equipment. A waiting room should be provided for the dental cases. The corridor is now used. The entire service should be upon the level of the main floor and as near as possible to an entrance to the building. With the suggested arrangement the volume of cases could be largely increased with a minimum outlay of expense and a minimum increase in staff personnel.

CHILDREN'S FRESH AIR CAMP

A dentist spends two half days per week at the Fresh Air Camp. He cares for the children of the institution only. Simple extractions are made under novocain. More serious work requiring general anaesthesia is referred to the City Hospital.

JEWISH ORPHAN ASYLUM

Two dentists each spend a full day per week at the Asylum. General service is rendered the children. Simple extractions are made with the use of novocain. More serious cases requiring a general anaesthetic are taken on occasions to the dentist's private office. Service is for the children of the institution only.

ST. LUKE'S HOSPITAL

There is no official dental appointment on the staff of St. Luke's Hospital. However, a dentist administers anaesthetics almost constantly and is recognized by the staff, but has no appointment. On rare occasions this dentist removes teeth, but no dental service is provided.

LAKESIDE HOSPITAL

At present there is no official dental service at Lakeside Hospital; however, we are informed that such is under consideration and will probably be inaugurated at an early date.

CLEVELAND STATE HOSPITAL FOR THE INSANE

The State Hospital has not at the present time a dentist on its staff and has not had for a year or two past. We are informed that they have no appropriation for that purpose, therefore do not anticipate such an appointment in the near future. The State Hospital for several years furnished dental service to the inmates.

ST. VINCENT'S CHARITY HOSPITAL

At the present time there is no dental service at St. Vincent's Charity Hospital. In many respects Charity Hospital would be an ideal location for a Dental and Oral Surgery.

Mention of dental service in industry will be found in the Industrial Hygiene Survey, Part VII. A limited service of high quality is provided in five establishments approximately at cost. There is urgent need for more dentists in industry and the need would seem to justify inclusion of some of the special dental hazards in industry in the dental curriculum.

COLLEGE OF DENTISTRY

This professional school has passed through many financial, educational and administrative vicissitudes and at present is within reach of standards and support which will entitle it to rank with the best.

Its present needs are more teaching room, a moderate increase in its equipment, a small outlay for a simple teaching, reference and periodical library, improvement in the teaching of anatomy and pathology in conformity with the high conceptions and standards of these departments in the medical school and a considerable increase (10) in the teaching staff, especially of full-time men in the laboratory and clinical courses.

More students are now accepted than can properly be accommodated and taught. An increase of 50% in the space is needed, if an entering class of 75 is accepted. It is estimated that \$200,000 will be needed for additional space in the next five years. Probably \$10,000 would meet the lack of equipment now.

The absolutely indispensable in the way of books and periodicals for teachers and students would cost about \$4,000.

To pick teachers of dentistry simply from among successful practitioners will continue here the same misfortunes and inadequacies which have been a plague to medical education. The men selected must expect to make teaching a career and be fit to employ permanently as such.

As soon as the obligations assumed by the University when it took over the school from its commercial supporters are paid off, an endowment should be raised for the support of dental teaching. Within the next five years this school needs a million and a quarter of dollars to provide the grade of education for which applicants are clamoring, in numbers the University cannot accept.

The College of Dentistry would profit greatly from organized interest, criticism and support by the Cleveland Dental Society. The school and the profession cannot get along without each other and for the credit of both they should have mutual support, which does not exist at present.

There are no facilities for graduate education of dentists. They should be developed and offered by the college.

THE DENTAL HYGIENIST

In the interest of public service, to provide trained aids to the practicing dentist, to keep pace with the practice in leading states of the country, it seems evident that the College of Dentistry should undertake the training of dental hygienists and should support the efforts of the organized profession to obtain the amendments in the State Civil Code necessary to legalize this profession in Ohio.

Dental repair work among children has been reduced by 50% by the employment of dental hygienists.

The modifications in the State Civil Code proposed by the Cleveland Mouth Hygiene Association (affecting by slight changes in the wording sections 1320A, 1321A, 1320B, 1321B, 1321C, 1321D, 1321E, 1323A, 1324A, 1324B, 1324C) are strongly approved, and it is our opinion that the changes might well go further and permit the practice of dental hygienists in private offices of dentists as well as in institutions. Such modifications have been made and have met with uniform satisfaction in eleven other states, including Connecticut, Massachusetts, New York and Maine.

There are two important professionally supported activities in the field of dentistry of considerable importance in Cleveland. One, the Dental Research Laboratory of the National Dental Society, has been a center of important studies in the interest of exact scientific practice. The other, a distinctly local organization, the Cleveland Mouth Hygiene Association, must be credited with most if not all that has been done in the field of public education in preventive dentistry and oral hygiene in the city. From modest beginnings in 1897, when its influence was first felt in the better teaching of school children, this Association developed increasing public support and resources. In 1905 it maintained the dental dispensary at City Hospital. In 1914 money was raised sufficient to pay expenses of operating six school dental dispensaries. Since then the Board of Education has paid for them.

The work of the Association has continued to be effective and their budget of \$11,533 for 1920 to defray the expenses of the five dispensaries at Health Centers was approved by the Welfare Federation.

The Survey is indebted to officers of each of the professional groups above considered for information and advice.

RECOMMENDATIONS

It is recommended that:

1. Measures be taken to obtain such amendments to the State Civil Code as will permit the licensing of dental hygienists and their employment in private practice and in public institutions, under the direction of licensed dentists.
2. The State Civil Code be amended to require the annual registration of licensed dentists.
3. The training of dental hygienists be undertaken by the College of Dentistry.
4. Sufficient financial support be obtained for the College of Dentistry to provide adequate increase of space, teachers and equipment, a library, and freedom from debt on account of obligations to commercial interests.
5. The Board of Education aim to provide a gradually increasing service which within the next five years will put all school children under adequate periodical dental inspection, cleansing and repair. Prophylactic cleansing of children's teeth twice a year is adequate. Tooth brush drill should be a part of school education.
6. Those responsible for the children attending the parochial schools institute dental service similar or equivalent to that advised for the children of the public schools.
7. Administration of all public dental school and dispensary services supported by the tax payers be put under the direction of one competent full-time paid dentist, within the Division of Health or under the Board of Education.
8. The dental surgical service at City Hospital be increased fourfold.
9. The dental surgical service for out-patients at Mt. Sinai be increased as soon as funds can be obtained.
10. The Hospital Council prevail upon at least two other of the privately endowed hospitals to establish out-patient dental service.
11. A dental surgeon be appointed on the visiting staff of each of the larger general hospitals and a dental interne be provided to carry out such prophylactic and reparative work on patients as their condition permits or requires.
12. A dentist be provided at Warrensville Infirmary.
13. Both medical students and nurses receive in their preparation to practice, instruction in the principles of the cause and prevention of dental disease and that nurses receive practical training in the technic of cleansing patients' teeth.

Pharmacy in Cleveland*

By HAVEN EMERSON, M. D.

AS the knife is to the surgeon, so the drug or chemical is to the physician, and there must be keenness and strength and appropriateness in each. Whether we look upon the pharmacist as the dispenser of package goods over the counter, the compounder of special remedies or physicians' prescriptions, as an analytical chemist or as a wholesale manufacturer of standard drugs and biological products, he is as indispensable an auxiliary to the physician in the medical service of the community as are the dentist and the nurse. His education, the conditions of his employment, his protection against illegal practitioners, his standards and his aspirations are all matters of importance to the public health and to the welfare of the sick.

In the absence of any authoritative or official registry of licensed or graduate pharmacists in Cleveland, and using the figures available from the roster of the Northern Ohio Druggists' Association and the lists in the hands of local wholesale drug supply houses, we can estimate that there are at the present time about 400 drug stores and probably 500 or more registered pharmacists and registered assistant pharmacists in Greater Cleveland.

Probably ten per cent of the above number have had no college training and it is safe to say that seventy-five per cent have had it. What number have had some college training but did not graduate in pharmacy it is impossible to estimate.

The length of courses taken by those who graduated was either two or three years.

The major portion of the pharmacists here who have had college training received it at the Cleveland School of Pharmacy prior to the time when it became an integral part of Western Reserve University. Some few graduated from Ohio State University, Ohio Northern University, the University of Michigan, The Cincinnati College of Pharmacy and the Philadelphia College of Pharmacy.

PHARMACY LAWS

Prior to August, 1915, anyone could take the state examination offered by the State Board of Pharmacy for registered pharmacist or registered assistant pharmacist if he had served an apprenticeship of four years in a retail drug store.

If the applicant had attended a school of pharmacy he usually received credit on his "experience requirement" for the time he spent in school.

Schools of pharmacy made no requirement of high school education for entrance until a few years ago when they began to require one year of high

*We are indebted to Mr. Edward Spease, Dean of the School of Pharmacy of Western Reserve University for valuable aid in preparing this chapter and for information dealing with drug supplies for hospitals and in the question of proprietary medicinal preparations.

school training. Some few university schools have of course for some years past demanded high school graduation as a requisite for entrance.

In 1915 the Ohio Legislature passed a law requiring two years of high school study for entrance into recognized pharmacy schools and that the applicant be a graduate of one of these recognized schools. The matriculant must also obtain an entrance certificate from the State Board of Pharmacy and this certificate is issued by an entrance examiner who may evaluate credits or give examinations to obtain them. This entrance examiner himself must be a college graduate with the degree of A. B. or B. S. and must not be connected directly or indirectly with any pharmacy school. This examiner besides his experience as a high school teacher is today an employe of the State Department of Public Instruction.

The legislature in 1919 passed an amendment to the Pharmacy Law requiring four years of high school for entrance into a pharmacy school. This must be upon diploma after four years of study in a high school, normal school or academy, or be by examination given by the state board entrance examiner.

The course of study given to a student in a recognized school must conform to the Pharmaceutical Syllabus of 1913, which was prepared by the American Pharmaceutical Association, the American Conference of Pharmaceutical Faculties and the National Association of Boards of Pharmacy. The least course given must be of two years' duration, consisting of certain didactic and laboratory hours totaling not less than 1,200 in all. The course must be given entirely in the day time and two months must elapse between the two school years. Not less than three full-time professors must be employed.

Some of the Ohio schools and notably the Western Reserve University school exceed this minimum. Here the school years and hours per week are of university length and the work is of university grade. A total of more than 1,700 hours is given for this two years' course. Four full-time instructors and nine part-time instructors are employed.

Among the laws governing the practice of pharmacy are to be found all the Pure Food and Drug laws, Narcotic laws, Prohibition laws, Poison laws and special regulations governing the sale of drugs in drug stores.

ADEQUACY AND ENFORCEMENT OF LAWS.

The laws now governing pharmacy would be entirely adequate if there were not so many exceptions to them. As they now stand they are quite rigorous enough concerning what is to be sold and how it is to be sold in drug stores, but the exceptions to the laws permit anyone to compound patent medicines and sell simples, such as Epsom salts and the like, in stores other than drug stores or from wagons or by house-to-house canvass. Many poisonous substances may also be sold if put up in packages bearing proper labels.

One of the tendencies of the present time is for druggists to cease manufacturing preparations for their store use and to buy these preparations ready made. This has been brought about partly by the fact that manufacturers have secured laws through which they may purchase tax free alcohol for the manufacture of such preparations as tincture of iodine and certain other preparations where there is absolutely no question of the alcohol being completely denatured. The objection to this lies solely in the fact that the Government denies this privilege of economical purchase of alcohol to the retailer, by requiring this alcohol to be secured in large quantities and to be denatured with the iodine or other substance at the distillery. This enables the manufacturer to make and sell many standard drugs much cheaper than can the retailers. The same privilege should be extended to the retailer or to groups of retailers. Anything that limits the retail druggist's professional practices tends to discourage and suppress his ability. In like manner the prescribing of proprietary preparations by the physician lessens the druggist's practice and hence his ability to compound. Few physicians think out and write their prescriptions with a definite purpose for the use of each ingredient.

The habit of "counter prescribing" is not as prevalent as is supposed but is always augmented in a neighborhood where a dispensing physician resides. Two things will overcome this practice entirely, one is strict enforcement of law relative to this practice and the other is education both of the physician and of the pharmacist. It is rare to see a druggist who is a thoroughly educated and cultured man do very much counter prescribing or do more along this line than to sell medicines of the customer's own selection. It is not rare to find this druggist often advising the customer to go to a physician.

A much better type of drug store service would be available if the law requiring a registered pharmacist to be actually in a retail drug store, hospital or industrial plant pharmacy, and other places where drugs are compounded and dispensed, were rigidly enforced.

That these exceptions are tolerated is due to the lack of knowledge on the part of the public as to the danger of indiscriminate sale of drugs and poisons and to the apathy of physicians in supporting measures to remedy these conditions.

About the only thing that may not be done outside of a drug store is prescription filling.

The State Board of Pharmacy is permitted to hire only one inspector to see that drug stores have a registered pharmacist in them at all times and to see that proper registration of bulk poisons is made. This inspector may not receive much over \$1,400 per annum and of course he must be responsible for the entire state. This means that not even the drug stores are forced to obey the laws, to say nothing of the dispensing of drugs indiscriminately by unqualified persons in hospitals, industrial plants and stores other than drug stores.

The clause of the Ohio Statutes requiring a registered pharmacist to be in actual and personal charge of a drug store at all times is not rigidly enforced, due largely to lack of inspectors to secure evidence, and indeed it seems scarcely necessary to attempt its enforcement when drugs may be indiscriminately compounded and sold by anyone if only the vendor does not call his place of business a drug store.

The city of Cleveland has no rules, laws or regulations governing drug stores, with the exception of the narcotic ordinance and the general sanitary ordinances.

COOPERATION WITH THE HEALTH DEPARTMENT

The druggists of Cleveland, through their organization, The Northern Ohio Druggists' Association, an incorporated body, have been able to aid the Health Department greatly in correcting many abuses in sales of drugs and medicines. They have appointed an advisory board who meet with the City Chemist, at his request, upon matters in which they are interested. When mistakes have been made in prescription filling, in drug stores, these mistakes have been brought to the attention of all the stores and aid has been given the department in the rectifying of these mistakes.

The most important feature of the work is in the review of patent medicines. The druggists have agreed not to stock patent medicines unless they have been submitted to the City Chemist for approval of label and claims, and whenever the City Chemist issues an order for the removal of a patent or proprietary medicine from the Cleveland market the druggists have refused to sell this preparation until the order has been rescinded. The force of this is that the City Chemist need not bring suit against the druggist or druggists in question to restrain a sale, but that the burden of proof is upon the manufacturer and he must either convince the City Chemist of the merit of his claims or must bring suit against him. No suits have been brought by such manufacturers, nor is it at all likely that such suits will be brought, as long as there is judgment and honesty used in issuance of the orders by the City Chemist; for the bringing of a suit would require the disclosure of the ingredients of the proprietary medicine and at once the value of the nostrum would be dissipated since secrecy and the claims of a therapeutic value based on worthless or inert ingredients is the basis of this whole colossal fraud. The ingenuity and effectiveness of this method of repression of valueless or fraudulent patent medicines is worthy of imitation in other cities and states. This and the appreciation by the press of the value of honest drug advertisements would soon stop a national disgrace, save the public millions of loss annually and spare the ignorant and the ailing the disappointment of useless medication.

THE SCHOOL OF PHARMACY

The School of Pharmacy of Western Reserve University was founded in 1883 by the local druggists. At that time only a series of lectures were given to apprentices. From this small beginning it grew until two courses were

iven, one of two years' duration and one of three years' duration. Until the fall of 1917 these courses were arranged so that the student could go to school three days a week and work on alternate days in a retail drug store. Since the fall of 1917 the student has been required to put in full university hours in school, both per week and per year. The two-year course is now effected upon the basis of giving the student two years of college work of university length and quality. The school is located in a building in the heart of the business district, which today, due to traffic and business conditions, does not permit the use of delicate instruments for instructional purposes. The surroundings detract greatly from the educational value of the school.

The faculty consists of four full-time instructors, three of whom have the university degree of B. S. and two of whom have an additional degree of M. S. One of those with a degree of B. S. has no pharmaceutical degree, but two of them have the degree of Pharmaceutical Chemist. The fourth instructor mentioned above has the degree of Graduate in Pharmacy and the degree of Pharmaceutical Chemist.

Part-time instruction is given by nine other men, one with the degrees of A. B., A. M. and M. D., another with the degrees of A. M. and LL. B., another with the degrees of A. B. and A. M., another with the degree of LL. B. The others are laboratory assistants, one of them a senior in the college of liberal arts during the past year.

As the School of Pharmacy grows the laboratory assistants will, as opportunity offers, be chosen from among the graduate students.

The School of Pharmacy has been financed during all these years from tuition fees and by gifts from the local druggists. This method of financing does not permit of very much development toward better things and indeed at present almost forbids growth.

The School of Pharmacy needs:

- (a) Location on the University campus, a move which is planned for the immediate future.**
- (b) Endowment of approximately one million dollars, or pledges for annual support amounting to the interest on that amount at five per cent.**
- (c) Greenhouses and a medicinal plant garden, to serve the double purpose of providing live material for demonstration and research (instead of relying at present upon the dried "cadaver" material of the commercial market) and of furnishing fresh drugs of standard tested quality to the hospitals of the city. The value of fresh herbs, as in the measurement and study of the effects of belladonna and digitalis, for instance, is obvious. The effect of soil, temperature and other cultural conditions on the quality of drugs could be studied with great advantage.**
- (d) Expansion of the courses to permit of granting a degree of B. S. after four years of study, to properly qualified students, men and women. This expansion should permit of a four-year study of chemistry and should**

include physics, mathematics and certain academic or cultural studies and languages to permit the pharmacist to be an educated as well as a trained graduate. This plan is now in existence in all the large universities of the Middle West and West. The pharmacy schools east of Ohio are nearly all on the every-other-day plan, as mentioned above. New York and Pennsylvania schools will not go upon the basis of requiring high school graduation for entrance for another couple of years.

- (e) **Additional instructors.** The school is now doing no research and it can neither maintain its present standing nor progress unless its teachers be productive. The research problems confronting the student of pharmacy are many and it is indeed discouraging to scholars to be so burdened with teaching that they can give no thought to research. Valuable cooperative research facilities should be made available through joint studies with the Department of Pharmacology of the Medical School, which has already made so many notable contributions to scientific therapeutics.
- (f) **A Manufacturing and Professional Service for Hospitals.** The School should equip a manufacturing laboratory where preparations, liquid, solid and tablet form, should be produced for the hospitals. This would not only create an incentive for good work on the part of the students but would show them during their formative period that habits of exactness are necessary and that their work is directly related to public health.

The elimination of high overhead charges and the manufacture on a cost basis in such quantities as the hospitals now use cannot help but materially lessen cost of all such materials to the hospitals. It is inferred in the above writing that each hospital maintains a pharmacy and complies with the Ohio Statutes in employing a registered pharmacist. The Survey recognizes that this is not a true statement of existing conditions. It may be, however, that small hospitals could have their ward requisitions or prescriptions filled at certain hours by a traveling pharmacist and his corps of student assistants, or could send them to a larger hospital at certain intervals and have them taken care of properly in that way.

The School of Pharmacy of Western Reserve University can offer a service to the hospitals of Cleveland that may be said to have two direct objects.

The first is to enable the hospitals to render a much higher type of medical service to the public, and the second is to lower the cost of medicines to the hospitals. Under the first heading, which is one entirely in keeping with the ideals of good hospital service, the Pharmacy School should be asked to serve in an advisory capacity.

1. It should supervise the organization and arrangement of the hospital pharmacies.
2. It should aid in the purchasing of pharmacy supplies, inasmuch as it is impossible to buy drugs and chemicals intelligently without a direct knowledge of the items themselves and of the firms from which they are bought. The tendency of modern times is to view drugs and medicines

as commodities only. This has been brought about by the rapid growth of "patent" and package medicines and for this reason price is sometimes the only deciding factor.

3. It can advise in regard to the proprietary medicines now in use in the hospitals to avoid the duplication of preparations and to show when many of these preparations, if needed, can be manufactured by the hospital pharmacy or by the school organization as discussed later.

It can analyze and otherwise test the drugs, preparations and chemicals that are purchased after competitive bidding, in order that sick room supplies may meet standard specifications. This will insure to the physicians a knowledge that the substance supplied is exactly what it should be.

If the above suggestions be carried out it will result in systematizing the pharmaceutical work of the hospitals which, unfortunately, is often lightly passed over in perfecting the other seemingly much more important services of the hospital. It will also result in directing all purchasing through one office, such as is maintained by the Hospital Council, and thus the supply of any one item for a given period for all hospitals will be purchased at one time, entirely upon specification and with the result of a better price for the quantity purchased. Under this last, or the second heading, the School of Pharmacy should likewise carry out two things:

Furnish its senior students to the hospitals for internships.

This would accomplish two purposes. It would provide cheap but efficient help to the hospital pharmacist, enabling him to render a service in the hospital that he is unable to give under the present arrangement. This is especially true where free or part-pay clinics are conducted and medicines dispensed. Besides demonstrating the value of an educated and not "rule-of-thumb" pharmacist to the hospitals themselves, it will send out to the public men better equipped to serve it by reason of this high type of practical training. It need scarcely be added that it will further the pharmacist's own knowledge of his responsibility to the public whom he serves.

A school of pharmacy to be efficient should have the same academic standard as a school of medicine. Unless the school of pharmacy is supported as are hospitals and medical schools the same menace will result as occurred in the era of proprietary medical schools and commercial hospitals, and the public health will suffer instead of gain at the hands of its graduates.

RECOMMENDATIONS

It is recommended that:

The interest of the Academy of Medicine and of the Hospital Council be united with that of the Northern Ohio Druggists' Association and of the Division of Health, to bring action through the State Legislature for adequate personnel and appropriation for the enforcement of existing laws dealing with the presence of the registered pharmacists in drug stores and hospitals.

2. Amendments in the laws of the state be obtained which will bring to an end the pernicious practice of house-to-house, street vendor and other irresponsible kinds of drug selling and will restrict the sale of drugs to such stores as have a registered pharmacist on the premises during business hours.
3. Amendment in the state law be obtained which will permit retail druggists, through controlled cooperative action, to obtain the benefit of the same economies in the purchase of tax free alcohol as are now the exclusive privilege of the large manufacturers.
4. The policy of the Division of Health in suppressing the sale of fraudulent proprietary medicines be vigorously supported by the Chamber of Commerce, the press and by the advertising interests of the city.
5. The trustees of the University move as rapidly as practicable to meet the needs as indicated above, particularly in the matters of providing (a) greenhouses and a plant garden, (b) teaching staff adequate to permit of research as part of the duties and privileges of the instructors, (c) space and equipment to permit the school to offer the services of its instructors and students in the process of education, to the hospitals of Cleveland and for the testing, standardizing and manufacture of drugs and chemicals.
6. The Cleveland Hospital Council invite the School of Pharmacy to survey the conditions and costs of hospital purchase and compounding of drugs and chemicals, with the object ultimately of obtaining from the staff and students of the school in return for certain privileges offered by the hospitals for the training of students in practical pharmacy, the consultation service and economies in purchase and manufacture which may be expected from such a professional and educational group.
7. Each hospital not now purchasing drugs and chemicals through the Central Purchasing Bureau furnish the Bureau with a list of drugs and chemicals purchased by them for the past five years, or failing such record, for the ensuing year, in order that the bulk of the trade may be estimated and action taken by the Hospital Council and the School of Pharmacy in the interest of economy.

THE CLEVELAND HOSPITAL AND HEALTH SURVEY REPORT

List of Parts and Titles

- I. Introduction.**
General Environment.
Sanitation.
- II. Public Health Services.**
Private Health Agencies.
- III. A Program for Child Health.**
- IV. Tuberculosis.**
- V. Venereal Disease.**
- VI. Mental Diseases and Mental Deficiency.**
- VII. Industrial Medical Service.**
Women and Industry.
Children and Industry.
- VIII. Education and Practice in Medicine, Dentistry, Pharmacy.**
- IX. Nursing.**
- X. Hospitals and Dispensaries.**
- XI. Method of Survey.**
Bibliography of Surveys.
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**THE CLEVELAND HOSPITAL COUNCIL,
308 Anisfield Building,
CLEVELAND, OHIO**

Nursing

PART NINE

Cleveland Hospital and
Health Survey

Nursing

PART NINE

**Cleveland Hospital and
Health Survey**

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Preface

The Hospital and Health Survey of Cleveland was made at the request of the Cleveland Hospital Council.

The Survey Committee appointed to be directly responsible for the work and through whose hands this report has been received for publication consisted of the following:

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The expenses of the Survey and of the publication of the report have been met by appropriations received from the Community Chest, through the Welfare Federation, of which the Hospital Council is a member.

The report as a whole, or by sections, can be obtained from the Cleveland Hospital Council. A list of the parts will be found in the back of this volume, together with prices.

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INTRODUCTORY NOTE

THE Nursing Survey and Report has been in charge of Josephine Goldmark, Secretary of the Committee for the Study of Nursing Education, and Anne H. Strong, R. N., Assistant Secretary of the Committee.

The field work for the study of hospital training schools was done by Mrs. A. F. Piggott, Maryland State inspector of training schools. A brief study of the teaching in the larger training schools was made by Miss A. H. Turner, professor of physiology at Mt. Holyoke College. In writing the report on the hospital training schools, assistance was rendered by Miss Pauline Angell.

The investigation of public health nursing agencies in Cleveland was made jointly by Miss Elizabeth G. Fox, Director of the Bureau of Public Health Nursing of the American Red Cross, and Miss Janet M. Geister, Western Secretary of the National Organization for Public Health Nursing. To Miss Fox credit is due for outlining the plan for a Prenatal and Maternity Nursing Service and for the detailed recommendations to the various public health nursing agencies. Both these investigators, Miss Fox in particular, assisted in the writing of these reports.

The field work for the study of industrial nurses was done by Mrs. Anna M. Staebler, Secretary of the Massachusetts Committee on Health in Industry, and some supplementary studies in this field were contributed by Miss Wilma I. Ball, Secretary of the Consumers' League of Ohio.

To all the cooperating societies, who released their workers for the Nursing Survey for varying periods of time, acknowledgment and thanks are due.

Nurses' Training in Cleveland

Hospital Training Schools

THE study of hospital training schools in Cleveland has covered the thirteen schools recognized under the State Law. Of these, four were studied in much detail (City Hospital, Lakeside, Mt. Sinai and St. John's); remaining nine were more briefly inspected (Cleveland Maternity, Fairview, Glenville, Huron Road, Lakewood, St. Ann's Maternity, St. Alexis, Luke's and St. Vincent's.) The investigation centered upon all those factors in the hospital and the training school which are related to the nature and adequacy of the training; the adequacy of service to patients in the hospital was considered only in so far as it bears upon the work of the students.

The hospital training schools in Cleveland exhibit, in greater or less degree, the general characteristics which are found in similar institutions elsewhere. The excellence and the weaknesses inherent in the established system of instruction, both theoretical and practical, are amply illustrated in the various schools of the city. They share that spirit of devotion and service which has for a half century been the distinction and the legitimate pride of the training schools for nurses; they share also in varying degrees the lack of standards and of independent organization, the inadequacy of teaching and equipment, and the exploitation of students, which has been too often accepted in lieu of education.*

STANDARDS OF COMPARISON

The objects of study and standards of comparison taken in the study of Cleveland training schools have in the main been those set forth as "reasonable and desirable" in 1919 by the Committee on Education of the National League of Nursing Education. Without subscribing to the details of the curriculum there set forth, we have measured the training schools by these recognized standards together with certain additions of our own.

The standing of each hospital with relation to the desirable standards is discussed in this report; a separate detailed account of each hospital has been submitted to the authorities of the institution.

This record brings out the strong and the weak points of nursing education in Cleveland, and shows concretely how much remains to be done to bring the training schools up to the level which they should reach to meet the clinical opportunities and the clinical needs of the city.

To introduce radical innovations into any established human institution is obviously a slow and delicate task. In their business of nursing the sick, the hospitals cannot at once, or even within a short period of time, be deprived of their present labor supply. Any changes must of necessity be gradual, and in the following report the standards followed and the recommendations

* The investigation upon which the report is based was made in the winter of 1919-1920. Notable improvements have already been made in a number of the hospital training schools since that time and many others are under consideration.

made for immediate adoption only approximate the conditions under which students should ultimately be trained.

Within the required limits, undoubtedly many desirable changes in individual hospitals can be indicated, which will improve the training now given. But these changes should be recognized as merely ameliorative. They represent temporary improvements, not the fundamental reorganization of the training school under university auspices, which is needed for the future development of nursing education.

A UNIVERSITY TRAINING SCHOOL

In the possibility of a central training school under university auspices, Cleveland has the opportunity of making an important contribution to the ultimate solution of the problem, the independence of hospital and training school, the recognition of the nurse-in-training as a university student throughout. A preliminary university affiliation has already been temporarily and partially tried in Cleveland. The successful wartime expedient of providing college instruction in the fundamental sciences for 88 student nurses during the summer of 1918 set the precedent for an extension of such a university connection.

Moreover, the university has already given proof of its broadminded interest in permanently providing training of college grade for young women who desire to enter this increasingly important branch of public service, the profession of nursing. A preliminary plan has been proposed by the university for a future school or department of nursing, subject to obtaining financial support for such an undertaking.

The plan proposed, while still tentative, is highly commendable in including various features essential for the success of such a central university school. Briefly stated, it proposes to give a definite period of college training, chiefly in the introductory sciences but with some cultural studies, an equal length of time for hospital training and a final academic period for additional courses in the nursing specialties. For the graduates of these courses both the nursing diploma and the university degree are to be granted.

In this proposal for a School of Nursing a distinctive contribution is made. In the few other cities in which such a five-year college and hospital course is offered, the courses are in combination with but one or two hospitals; the Cleveland plan would be offered in cooperation with several hospitals to start with and with as many additional ones as "can maintain standards of training high enough to warrant their recognition."

SOME BENEFITS OF THE UNIVERSITY TRAINING SCHOOL

Better Students and Better Instruction

One of the main benefits of a university connection such as the one proposed would be to attract to the profession of nursing young women who are now repelled by the inferior teaching provided, and the subordination of their education to the needs of the hospitals. In the pre-nursing period

of instruction, it will be possible to give science teaching of far higher grade and with laboratory equipment far better than provided in the ordinary hospital course.

Improving Instruction on the Wards

A second benefit, upon which general stress should be laid, is the opportunity afforded to the university to exert its influence in raising the educational standards of the hospitals which desire affiliation. It is clear that one essential element of this plan must be the cooperation of the hospital in offering instruction in the wards of such a quality as to deserve the university degree. In our subsequent discussion of the Cleveland hospitals the success or failure of teaching in the wards is indicated. In the possibility of refusing affiliation to hospitals whose instruction in nursing procedures, either in the class room or in the wards, is below standard or educationally wasteful, the university school can be a potent force for good. It should use its power of approval or disapproval freely, for in no other way than by scrutiny and criticism of the grade of teaching provided by the hospital can the educational side of the training school be sustained against the exigencies of hospital needs.

TRAINING FOR ADVANCED WORK IN ADMINISTRATION, TEACHING, AND PUBLIC HEALTH

The special function of the university course will be to prepare the leaders in the different fields of nursing. Impartial investigation finds crying need for more adequately trained teachers and administrators in the hospitals.

Such a course would supply administrative heads with better fundamental training and a wider background than are now general. The limited education of many who are in positions of responsibility in the training schools has been one cause of their difficulty in grappling with the perplexing problems of the schools.

Similarly, such a course would help to provide more adequately trained nursing instructors. The lesser educational qualifications of instructors in schools of nursing as compared with instructors in colleges and other professional schools is very marked. In the schools of nursing the instructors are frequently required to teach many subjects, often more than teachers in country high schools; yet for this great task, they have themselves had only their own nurse's training, of perhaps some years past, sometimes supplemented by courses at Teachers' College, New York. Even after years of experience and the most painstaking work, the instruction often reflects the limited background of the teachers. A university training school would be of high value in providing teachers with more actual information as well as some knowledge of methods of teaching.

Thirdly, the university training school will fill a much needed place in providing the training essential to meet the demands of public health nursing. Here, the final period of academic study would include case work and

the many phases of social service, without a knowledge of which the nurse's training alone cannot fit a woman for acceptable work in this rapidly developing field.

A SHORTER BASIC TRAINING FOR ALL NURSES

In addition to training for advanced work the university should assist in providing better science teaching for the rank and file; that is, for students who have either no wish or no ability for specializing in the higher branches of nursing, but who would take advantage of a good basic nursing training, especially if it were shorter than the present three-year course. Such students would obtain in the university the training in the preliminary sciences; they would, under a plan to be subsequently worked out in detail, be graduated after a basic training of about two years and four months, with the diploma of nurse but without a university degree. Such nurses would be available primarily for bedside care. They would not have the added training and experience which is needed to fit for the exacting needs of public health nursing and for teaching and administrative positions; but by a reduction of the present three-years' course, the bedside nurses would be available in larger numbers and help to meet the present shortage.

Such a shortening of the course would be possible both through the better teaching in the college and also through the elimination of non-educational housekeeping duties and of the present indefensible repetition of services.

It will be noted that in the foregoing discussion no definite length of time has been proposed either for the full university-hospital course or for the briefer basic training. At present the 3-year course is the rule and a 5-year course has been suggested for the central university school. How far these courses may safely be reached by elimination of the non-educational features noted above, still remains to be determined.

Studies of hospital training schools in other cities, of which the Cleveland Survey has been one, are now in progress by the Committee on Nursing Education. From detailed observation of the work and instruction of first, second and third year students in different types of hospitals a composite picture will be obtained of the total careers of students and the training afforded at each hospital. This study will aid materially in determining how the present course may be reduced without sacrificing any of the essential services. Sufficient time has not yet been afforded to complete these intensive studies on which will be based our ultimate recommendations for a detailed curriculum for both types of university students.

RESULTS OF FIELD STUDY

It is obvious that no general statements can cover the Cleveland training schools as a whole. Their procedures naturally differ with their size, their age, financial resources, religious affiliations, etc. The results of our field study are here summarized so far as possible. The standing of the hospitals is shown with relation to the standards regarded as desirable under present conditions, that is, while students are still used to staff the wards. The dis-

ssion falls under the following heads: organization of the training school, minimum entrance requirements, capacity of hospitals and services offered, instruction, conditions of work and living conditions.

ORGANIZATION OF THE TRAINING SCHOOL

The relationship between schools of nursing and hospitals should be essentially the same as that created between medical schools and hospitals. The school of nursing, like the medical school, exists primarily to give technical education to students who are to obtain part of their training in the wards of the hospital. It follows necessarily that many important factors of the training school for nurses fall wholly outside the administrative scheme of a hospital.

(a). The best organization of a school of nursing is clearly the university organization, in which ward training is given in such hospitals as come up to the conditions of teaching and of living required by the university for education of its students.

(b). Until the university organization is formed a similar arrangement might be effected by an independent board, capable of directing the educational policies of the training school, which could contract with the hospital to give the necessary ward training supplementing the laboratory and didactic teaching supplied. Among the Catholic hospitals or in hospitals administered under religious organizations which have no Boards of Trustees which are subject to the Bishop of the Diocese, an advisory committee might be established at once to direct the educational policies of the training schools.

(c). In such hospitals as may still continue to keep the training school part of the hospital organization, there should be appointed by the Board of Trustees a training school committee, composed of both men and women, to direct educational policies. This committee should be composed of representatives of the Board of Trustees and other persons known to have had experience in education and also members of the alumnae of the school. The superintendent of the hospital and the director of the training school should be members of the hospital and representatives of the medical staff selected by the medical executive committee, though not members of the training school committee, should sit with the committee.

The superintendent of nursing in the hospital should be appointed by the Board of Trustees of the hospital, on nomination of the superintendent of the hospital, with the concurrence of the training school committee. It is considered desirable that the superintendent of the hospital should delegate to the superintendent of the training school the appointment and dismissal of nursing personnel.

The offices of principal of the training school and superintendent of nurses, that is an educational and administrative office, may or may not be combined in the same individual. When they are combined the head of the training school should be designated "Superintendent of Nurses and Principal of the Training School."

So far as concerns the make-up of the committee, in Cleveland only one of the 11 general hospitals studied had a training school committee approximating the desirable form.* This hospital is St. Luke's. It is worthy of note that the committee has on it an alumna of the school and that it has taken a special interest in providing, so far as is possible with unsuitable buildings, unusually homelike conditions of living for the nurses.

Some variations from the above form of the training school committee are the following:

At Lakeside eight of the twelve members are women.

At Huron Road the committee consists of only three members, all of whom are attending physicians. One is also a member of the Board of Trustees, and one is an instructor at Western Reserve University.

None of the ten remaining hospitals has a training school committee.

At Mt. Sinai this lack may in part account for the fact that the living conditions for the students and the equipment in class rooms and laboratories fail to come up to the high standards of the other departments of this hospital.

An advisory board at the City Hospital has recently disbanded and the appointment of the chairman of a new committee was at the time of the investigation under consideration by the Director of Public Welfare.

None of the Catholic hospitals has a training school committee; nor has Fairview, Glenville, or Lakewood. A former training school committee at Fairview has recently been abandoned.

COST ACCOUNTING

An adequate system of cost accounting is practically unknown in training schools. Cleveland is no exception to the rule. For none of the hospitals is it possible to state the per capita cost of student nurses, including maintenance as well as instruction. Nor on the other hand, is it possible to state the financial value of work done by the students and staff and the saving to hospitals from the utilization of their services.

MONEY ALLOWANCE TO STUDENTS

The once prevalent custom of paying students a small yearly sum during training is gradually being abandoned. To attract students of good calibre, it is clearly more desirable to devote such funds to improving the course of training. Better teaching, equipment and living conditions are a greater attraction for desirable students than a small financial inducement. Indeed, some hospitals instead of paying their students are charging a small fee for instruction.

In Cleveland the old custom of paying students exists in all but two hospitals, Lakeside and St. Luke's. Even in these, the system still prevails in the custom of providing uniforms and textbooks.

*The two special hospitals, Cleveland Maternity and St. Ann's, are omitted in this section.

MINIMUM ENTRANCE REQUIREMENTS

The Ohio state law requires that students be at least 18 years of age when they enter the training school. Most of the Cleveland training schools do not go beyond this requirement, but four, Huron Road, Lakeside, Lakewood and St. Luke's, make 19 the minimum age for entrance. In four schools, few students under 18 had at the time of our investigation, been accepted; at the City Hospital, there were 2 who entered under age, at Fairview 3, at St. Alexis 2, and at St. Vincent's 3.

The age at entrance of 459 students in 9 hospitals was obtained and showed that in all but 3 of these hospitals, the median age at entrance was 20 or over.

AGE AT ENTRANCE*

	Age Required	Median Age†
Huron Road	19	22
Lakeside	19	22
St. Vincent's	18	21
Glenville	18	20
Mt. Sinai	18	20
St. John's	18	20
Cleveland City	18	19
Fairview	18	19
St. Alexis	18	18

* Data on this point were not obtained from Lakewood and St. Luke's.

† That is, ranging all the ages from highest to lowest, the median is the age of the student in the middle.

MINIMUM EDUCATIONAL REQUIREMENT

According to the Ohio law, the minimum educational requirement for entrance into the training school is completion of one year of high school.

Of the 11 hospitals considered in this connection, 4 (Huron Road, Lakeside, Mt. Sinai and St. Luke's) require graduation from high school for entrance. At St. Luke's this requirement has just been put into effect, and the first class entering under the new regulation is made up entirely of high school graduates. In the other three schools, the requirement is of longer standing, and all three make exceptions to the rule, as is shown in the following table.

The personal histories of 528 students in 11 hospitals were obtained and showed that 347, or 65%, had completed four years of high school, as follows:

EDUCATION AT ENTRANCE

	Total No. of Students*	No. with 4 years of High School or more	Percent
Lakeside.....	133	125	93
Mt. Sinai.....	64	60	93
St. Luke's.....	59	50	84
Huron Road.....	33	26	78
Cleveland City	63	33	52
Fairview.....	24	12	50
St John's.....	30	11	36
St. Alexis.....	9	3	33
St. Vincent's.....	78	20	25
Glenville.....	22	5	22
Lakewood.. ..	13	2	15
	—	—	—
Total.....	528	347	65

Exclusive of the three Catholic training schools, St. John's, St. Alexis and St. Vincent's, and the 3 smallest training schools remaining, Fairview, Glenville and Lakewood (which, as is later suggested, might well combine in giving theoretical instruction to their students), the percentage of students qualified for college entrance is 83%.

* In a few hospitals data is not available for one or two students.

CAPACITY OF HOSPITALS AND SERVICES OFFERED

Desirable Standards

To qualify as fitted to give an adequate training of nurses, a hospital should provide the requisite number of patients and variety of suitable services. According to the standard, a general hospital under municipal or private endowment, neither too large nor too small, is best fitted for this need. As a teaching field the general hospital of 400 to 500 beds is held to rank first, if it gives not only the four main branches—medical, surgical, children's and obstetrics—but certain special branches, such as communicable diseases, mental and nervous disorders, etc.

If all of these branches are not included in the clinical resources of the hospital, they should be made available for the students through affiliation with other hospitals.

Hospitals of more than 500 beds, while they frequently offer a richer variety and number of services, labor under greater difficulties in the way of securing adequate supervision and instruction of the students.

Hospitals having less than 400 but more than 150 beds also offer excellent teaching facilities. Those of less than about 50 beds cannot maintain schools of accepted standards.

Findings

1. HOSPITALS OF MORE THAN 400 BEDS

The City Hospital

Cleveland the only hospital of more than 400 beds is the City Hospital with 781, of which 481 beds are utilized for training. The difficulties in giving adequate supervision for so large an institution have here been compounded by the insufficiency of the nursing staff for actual care of the sick. Shortage of students and of proper ward help has led to the diversion of graduate nurses to routine care of patients from their primary duty of supervision and instruction of students.

For example, the graduate nurse responsible for the supervision of students having training in the children's wards of 40 beds, had only 2 students and 1 attendant for the care of these patients. In addition she was also a nurse in the adjoining temporary influenza ward of 23 beds, where there was only 1 student and an attendant to assist her. In this emergency, the Superintendent of Nurses was trying to secure another graduate for the new ward, which had just been opened.

Supervision and instruction were clearly impossible; the first object was simply to care for the patients as well as difficult conditions permitted. The technical training on the part of the students was observed and under the circumstances could hardly have failed to occur.

Clinical Opportunities

As to clinical opportunities, this hospital offers an unusually wide range of experience. In contrast to all the other Cleveland hospitals, it offers intensive and acute medical service with definite segregation of chronics and a particularly adequate field for training in pediatrics and communicable diseases, including venereal disease.

The training school, however, is not able to make the most of these opportunities. The medical, surgical, obstetrical and children's services are inadequately staffed, poorly equipped, badly housed in the gloomy old building, and have been allowed to become run-down and below standard.

The contagious and venereal disease services, on the other hand, might be further developed to afford opportunities for affiliation for students with other hospitals.

The contagious disease service is in a new building with modern provisions for the efficient care of patients and consequent good training of students. Moreover, supervision is good and theoretical instruction is given at the same time with the practical experience on the wards, so that the two are properly correlated. Commendable precautions are taken to protect students from infection and to prevent them from carrying it to others. For this purpose the hospital is exceptionally well equipped.

This department is necessarily more fully staffed than other departments, even at their expense. The pupil nurse service is supplemented by affiliating students from two other hospitals. That the exceptional opportunities for training are appreciated by the students is evident from a comment from the superintendent of Glenville Hospital, one of the affiliating schools afterward visited. "This service is an elective one for senior students. So far all senior students have asked for it, and on return here comment most enthusiastically on their experience."

Other Cleveland schools of nursing might well take advantage of affiliation with this contagious hospital, thus securing a much needed experience for their students. Such affiliations would also release a certain number of City Hospital students for the other services there, as the four to six months of contagious disease experience required of them at present could be shortened if an adequate nursing service in this department were otherwise provided.

In the specific (venereal disease) wards, also, more favorable conditions for training are noted, and valuable experience for the student is found here, especially in the Women's Department, which includes 12 beds for obstetrics complicated by venereal disease. The capacity of the venereal disease wards is 50 men, 42 women and 8 children, and the building has recently been renovated to meet the demands of the service. The training possibilities are good and affiliation could well be arranged for students from other schools wishing to include this experience in their preparation for the public health field, or even in their general training. Such an arrangement would help to remedy the insufficiency of the nursing staff at present, which makes it impossible for the nursing duties to be properly organized.

The buildings for the tuberculosis service and the chronic patient service in which the nervous and mental cases are housed, although they might afford valuable clinical opportunities, cannot offer adequate training until radical changes have been made.

2. HOSPITALS OF BETWEEN 200 AND 140 BEDS

The second group of hospitals considered have the following number of beds.

St. Vincent's.....	290
Lakeside.....	289
Mt. Sinai.....	255
St. Alexis.....	250
St. John's.....	158
St. Luke's.....	140

While these hospitals offer a sufficient number of beds to comply with the recommendations for a good teaching field for nurses, a consideration of the variety of services provided is also needed in order to gauge their adequacy for the purposes of training.

Predominance of the Surgical Services

At the main, the outstanding fact is the inadequacy of the medical services and the specialties, broadly speaking, on the one hand, and on the other the predominating claims of the surgical services, at the expense of the former.

The predominance of surgical services is the natural result of the insufficient number of hospital beds, the emergencies of surgical need taking precedence of medical needs, and the added fact that a higher proportion of surgical cases than of medical require hospital care. The predominance of surgical services obviously makes for a badly balanced scheme of instruction.

It is plainly impossible to give a well-rounded nursing education when so large a proportion of the student nurses' time is absorbed in purely surgical or predominatingly surgical work. This lack of proportion is well illustrated in the records of practical experience of individual students in various hospitals.

Number of Beds and Percentage of Admissions

The most obvious evidence of the extent to which surgical training takes precedence of other services lies in the proportion of beds assigned to each and the percentage of admissions.

At Lakeside there are 85 surgical beds to 61 medical; St. Alexis has 124 surgical to 50 medical; St. John's 89 surgical to 29 medical; St. Luke's 56 surgical to 36 medical; St. Vincent's 123 surgical to 42 medical. At St. Joseph's, on the day this hospital was visited, of the 25 beds in the women's surgical department, 17 or over two-thirds, were occupied by surgical cases. At Mt. Sinai an even proportion is maintained, namely 47 surgical beds to 47 medical.

An analysis of the available figures showing the admissions for two hospitals makes still more clearly the extent to which Cleveland hospitals are given to surgical cases. At Lakeside in the year 1918 surgical admissions were 3,388 as contrasted with 1,819 medical, and in 1916 (that is, when the full surgical staff was available), there were 4,160 surgical admissions as against 1,498 medical. The latter figure included admissions in pediatrics. At St. Luke's the record of admissions for 1919 shows that 25% of the cases were medical as against 55% surgical.

Number of Days Spent in Surgical Services

The bearing of these facts on the nurses' training is shown by the record of their actual days spent in surgical services.

Thus, from a study of the records at Lakeside it was found that of 17 seniors who had been in the hospital 2 years and 9 months, 12 had already had from 7 to 10 months' training in the surgical wards and operating room, although the time planned for these services is 6 months. Of the remaining 5, 3 had had 6 months, 1 had had 5 months, and 1 had had 4 months in surgical services. When gynecological and gauze room experience is added, all as 75% of the time spent in private service, which may legitimately be reckoned as surgical, these 17 seniors had spent from 14 to 19 months in various surgical services.

In contrast to the time spent in the surgical wards and operating room (ranging from 5 to 10 months) is the time spent by these 17 seniors on medical wards, ranging from a little less than 2 months to 6 months. The median * is about three months and three weeks as against a median of seven months in general surgical experience.

At St. Luke's, 6 seniors, who had been in training from $2\frac{1}{2}$ to $2\frac{3}{4}$ years, had spent from 6 to 13 months in surgical services. This does not include the months spent in the private service, a large proportion of which is surgical.

These same students had spent from 4 to 8 months in the medical wards, the median being between 5 and 6 months as against a median between 9 and 10 months in surgical experience.

The actual experience of 12 seniors at St. Vincent's shows a similar disproportion. With two exceptions, these students had not yet completed $2\frac{1}{2}$ years of their training, and yet already 3 had had 9 months, 1 had had 10 months, 4 had had 12 months, 3 had had 13 months and 1 had had 14 months in the various surgical services.

The medical experience of these same students ranged from $4\frac{1}{2}$ to $8\frac{1}{2}$ months, the median being a little less than 6 months (174-177 days) as against a median of 12 months in surgical service.

That it is not impossible to approximate more nearly the program of services planned is proved by the example of Mt. Sinai. This hospital is more successful than any other in this group, in keeping the surgical experience to the specified time, even though the time planned is somewhat long. Six months each are allowed to medical nursing and surgical nursing, including nursing of private patients.

The records of 7 seniors, who had been in training 34 months or over, showed that in surgical service in the wards, the students spent from 3 months to a little more than 5 (160 days); the median is $4\frac{1}{2}$ months. In medical ward service, the 7 students spent from $2\frac{1}{2}$ to 7 months, the median being nearly 6 months (171 days). On private duty, the students had spent from a month and 3 weeks to 5 months, the median being a little more than $3\frac{1}{2}$ months (107 days).

As private duty is for the most part largely surgical, it is reasonable to conclude that at this hospital surgical service, which on the wards was slightly below the time planned, is supplemented by the private surgical duty, and the medical service, which in the wards approximates the 6 months planned, is not unduly prolonged by the private duty.

In the operating room all seven seniors under discussion exceeded the 2 months planned for this service. Two of these students, however, were specializing, and their time was purposely prolonged. Only one of the remaining five overstayed the time planned by as much as one month; the other four exceeded the time by one to two weeks.

* That is, ranging all the months from highest to lowest, the median is the figure showing the middle number of months.

From this summary, it appears that with the exception of Mt. Sinai the tendency is to devote at least twice as much time to surgical training as to medical.*

General Inadequacy of the Medical Service for Training

This inadequacy is due to two causes, the predominance of the surgical services, and the large proportion of chronics. The predominance of the surgical services and the consequent curtailment of training in the medical service, has been dealt with above. The proportion of chronics in the medical wards visited ranged from 40% to 58% in the three hospitals in which this condition was observed. At Lakeside, on the day when the medical wards were visited, 8 of the 19 patients on the men's ward, and 4 of the 11 patients on the women's ward were chronics. In order to make the most of the inadequate medical service for teaching, the students at Lakeside are, as an excellent practice, required to hand in written case reports while on duty in the medical wards.

At St. John's, on the floor assigned to medical cases, 24 were under treatment on the day of the inspection. Of these 14 were chronics and 2 were surgical cases. At St. Vincent's there were 14 patients in the women's medical ward, of whom 6 were chronics, two of them in reality boarders of several years' standing. At Mt. Sinai and St. Luke's no data on this point were obtained. At St. Alexis chronics are segregated on a special floor. But in this hospital, owing to the lack of graduate nurses, training is given in the women's wards only, so that students receive no experience either medical or surgical, in the nursing of men patients.

Communicable Diseases

At the time of the investigation, none of the hospitals in this group provided any experience whatsoever in communicable disease, except for occasional cases which develop in the hospital and cannot be transferred. This failure is all the more striking, owing to the rare opportunities for training in communicable disease offered at the City Hospital, of which the small hospital of Glenville, for instance, has taken advantage.

Pediatrics

Only two hospitals of this group, Lakeside and Mt. Sinai, have an adequate number of beds for training in this branch. The other four hospitals either provide no beds for this service, or provide a very small number, which are almost all used for surgical cases and thus afford no training in pediatrics proper.

Obstetrics

Of the six hospitals under discussion, three offer obstetrical training within their own wards. These are Mt. Sinai, St. John's and St. Luke's. Except St. Luke's, no provision is made for out-patient obstetrical training, the student nurses thus failing to obtain experience in outside prenatal work, or

* Records of actual experience were not available for students at St. Alexis and St. John's. From assignment of beds, it is evident that in these hospitals, as in St. Vincent's, at least two-thirds of the hospital service is surgical.

in caring for patients in their homes. At Mt. Sinai there is a large out-patient prenatal clinic, but students are not assigned to work in the district. The follow-up work there is done by the social service department. A few students, who elect public health work, may have prenatal experience in the University District. At St. Luke's, student nurses have training in all three branches of obstetrical work, prenatal, partum, and post-partum.

Lakeside and St. Vincent's provide obstetrical training through affiliation, the former at the Cleveland Maternity, and the latter at St. Ann's. The Cleveland Maternity affords training both on the wards and in the district, but Lakeside did not, at the time of the investigation, avail itself of the outside prenatal and partum experience for its students. Moreover, the type of supervision for student nurses given by the Cleveland Maternity is inadequate and scarcely up to the standards of modern public health work. Students from St. Vincent's have no opportunity for out-patient work.

The sixth hospital in the group under discussion, St. Alexis, has at present no obstetrical training either within its own wards or by affiliation.

(f). *Nervous and Mental Diseases*

Except for occasional cases, these hospitals offer no experience in the care of patients suffering from nervous and mental diseases, nor is there indeed any opportunity for offering such training to students. At the City Hospital there is a large group of mental cases, which should afford a desirable field for training. But the absence of any modern methods of treatment makes this impossible at present. In contrast to the now accepted methods of treatment in enlightened institutions, patients are under close confinement and practically in custodial care in gloomy cell-like rooms.

(g). *Private Service*

The public wards are the best training ground for student nurses, and by far the greater proportion of their time should be spent there.

It has been suggested that the ratio of private to free beds should not exceed one to four in hospitals which train nurses. Two of the hospitals in this group, Lakeside and St. Vincent's, have a ratio nearly twice as high as is considered desirable, the ratio in each case being 1:2.7. The ratio at Mt. Sinai is 1:5.5; at St. Luke's 1:4; at St. Alexis 1:3.9 (exclusive of beds on the floor used for chronics); at St. John's 1:3.7.

Mt. Sinai follows the excellent practice of relying mainly on graduate nurses for the staffing of the private rooms.

The days spent in private service by students at Lakeside range from 87 to 306, the median being 195 days, or slightly over six months. The time planned for the service at Lakeside is four months. At St. Luke's the range is from 131 to 210, and the median between 140 and 155 days. At Mt. Sinai, the range is from 53 to 149 days, with the median 107 days, about three months less than the median at Lakeside, and a month less than at St. Luke's.

Information as to the time actually spent by students in private service was not obtained from St. Alexis, St. John's and St. Vincent's Charity. St.

Vincent's Charity plans that each student shall devote six months to private duty nursing. It is apparent that undue emphasis on the private service constitutes a distinct weakness in the training at Lakeside and St. Vincent's Charity and the same tendency is noticeable at St. Luke's.

3. HOSPITALS OF BETWEEN 140 AND 50 BEDS

Exclusive of Cleveland Maternity (61 beds) and St. Ann's Maternity (55 beds), to which, as special hospitals, these standards do not apply, there remain four smaller general hospitals. These can provide the necessary variety of services only by affiliation with larger institutions. These are:

Fairview.....	100 beds
Huron Road.....	87 "
Glenville.....	70 "
Lakewood.....	53 "

The medical service in all four hospitals is limited and affords but meagre training for nurses. In fact, it appears that the only services adequate for nurses' training are surgery and obstetrics. Even in the surgical service, little or no experience is afforded in such important branches as orthopedics and diseases of the eye and ear. In obstetrics also, training is limited. With the exception of the Huron Road students, who affiliate at Cleveland Maternity, the service is entirely lacking in partum and post-partum care in the homes. Students at Glenville and Huron Road receive prenatal training in the University Health District. Lakewood and Fairview students do not get this experience. In all four hospitals too large a proportion of the training is in the private service.

For medical, communicable, nervous and mental diseases, as well as for pediatrics, all of the hospitals of this group need affiliation, to give adequate training. Glenville makes an excellent beginning by requiring four months' affiliation in pediatrics and providing elective courses in communicable diseases, both of these at the City Hospital. Glenville was at the time of the investigation the only hospital in Cleveland to recognize and take advantage of the unusual clinical facilities offered there. The other three hospitals in this group do not make good their own deficiencies by any such affiliations, thus failing to recognize the primary importance of these services in the nurses' training.

4 OUT-PATIENT DEPARTMENTS

Of the 11 general hospitals, 5 have no out-patient department. Of the 6 remaining institutions, Mt. Sinai offers the most complete opportunity for training, as almost all the services are represented in active clinics. Lakeside records show a higher daily average of patient attendance than Mt. Sinai, but Lakeside lacks prenatal and dental service. St. Vincent's Charity lacks pediatric, orthopedic, prenatal and dental services. The work at St. Luke's is reported to be "that of a specialized industrial clinic with chiefly surgical interests." The medical clinic is small and an eye, ear, nose and throat clinic has just been started. There are, however, active prenatal

and gynecological clinics, where students may receive valuable training. The Huron Road dispensary is given over almost entirely to surgical cases; medical cases are only occasional. The City Hospital has a weekly dental clinic, which is very active, but there is no other dispensary service.

Since a detailed report has been made on the organization and work of the Cleveland dispensaries, they are not further treated in this report. None of them are fully utilized as teaching fields for student nurses. Likewise social service departments are not treated here, since a special study has been made of the work of these departments.

5. PUBLIC HEALTH NURSING

At present a very small number of students take advantage of the exceptional training for public health work offered in the University Teaching District. In this District, Cleveland has made a distinct contribution of the highest grade to the development of generalized city nursing. In no city is a better opportunity afforded for training and supervision in such work, if sufficient time is given to take advantage of it.

Two months of this training are now allowed by five hospitals. The course is elective at City, Lakeside and St. Luke's. It is required at Glenville and Huron Road. Mt. Sinai allows four months of training in the University Teaching District, but the course is available for only three or four students each year. At City also it is possible to elect a four months' training in the District.

INSTRUCTION

Teaching of Nursing Procedures

DEMONSTRATION ROOM

A special room for the teaching of nursing procedures is provided at seven of the eleven hospitals considered in this section.* At St. Vincent's, however, the room was not in use at the time of the investigation. At Glenville, Huron Road, St. Ann's and St. Luke's the same class room is used for nursing procedures that is used for other subjects.

At Lakeside and City the class room is large; at Mt. Sinai it is adequate; at Glenville it is small. At the others the room is fair as to size. The room at St. Ann's is crowded with material used in connection with the lecture courses.

At only three hospitals is the demonstration room equipped with running water and gas or electric stoves. These three are Glenville, Lakewood, and Mt. Sinai. At the City there is a stove but no running water; at Fairview and St. Luke's there is running water but no stove. The other hospitals rely on facilities in adjacent rooms.

All the rooms are supplied with material sufficient for demonstration, though there are special difficulties in hospitals which have no special room. At Huron Road a bed is brought in when needed. At St. Ann's material for demonstration is said to be brought from the wards when needed. At St. Luke's the material is brought over from the hospital by the instructor.

* Information on most of these points was not obtained from St. Alexis and Cleveland Maternity Hospitals.

At only two hospitals is the demonstration room supplied with material sufficient for practice by individual students. These hospitals are Fairview and Mt. Sinai.

METHODS OF TEACHING

With the exception of St. Vincent's, where students were being taught entirely on the wards at the time of the inspection, there is class room instruction in the theory and practice of nursing in all eleven training schools.

All are supplied with a Chase doll for demonstration. In addition, patients are used for demonstration except at St. Ann's, St. John's, and St. Luke's.* At Lakeside, patients are brought over from the wards as substitutes for the demonstration of some procedures, especially for such procedures as bathing and hair-washing. Patients serve as subjects at Glenville occasionally, and at Fairview also patients are occasionally used, but only on the wards.

PRACTICE IN THE CLASS ROOM

Special periods for practice in the demonstration room are assigned at Huron Road and St. John's. At Huron Road, a practice hour of 1 hour weekly is allowed, except on Saturday. At St. John's, 3 hours of practice a week is required of probationers and 1 hour a week of juniors and seniors, as a way of review.

At Fairview, City, and Lakeside, no special period is assigned, but part of the demonstration period is used for practice by individual students. At Mt. Sinai the study hour is frequently used for practice. At St. Luke's there is no opportunity for practice between classes, as the room is in use for other subjects and all material removed. Glenville and St. Ann's likewise make no provision for practice in the class room.

Class room practice is supervised by the instructor in the six hospitals which make any provision for such practice of procedures.†

HOURS

The hours devoted to class room instruction in the theory and practice of nursing by Cleveland training schools are as follows:‡

St. Luke's.....	170 hours
Mt. Sinai.....	151 "
Lakeside.....	120 "
Lakewood.....	120 "
Huron Road.....	100 "
St. John's.....	65 "
City.....	60 "
St. Vincent's.....	60 "
Fairview.....	50 "
Glenville.....	48 "

* At Huron Road no information was obtained as to the use of students and patients as subjects for demonstration. At Lakewood the course was in process of organization, and the use of students as subjects was planned.

† Supervised practice is planned at Lakewood.

‡ Course at St. Vincent's not given at time of inspection.

St. Ann's Maternity Hospital gives 10 hours to affiliating students. At Cleveland Maternity 24 procedures are demonstrated to affiliating students.

CORRELATION OF THEORETICAL WORK WITH PRACTICAL WORK IN THE WARDS

Obviously, the test of theoretical instruction in nursing is its application in the wards. The teaching of practical procedures, to be fruitful, must be associated not only with demonstrations and practice in class, but with close supervision of the student's work in the wards as soon as possible after the class work. Without such close correlation of theory and practice, nursing technic tends to be lax and unintelligent.

EXAMPLE OF GOOD CORRELATION

Of the thirteen hospitals in Cleveland a high standard of correlation was found only at one hospital, Mt. Sinai. Here the teaching of nursing procedures is not only excellent in the class room, but is followed up by careful assignment of students for practice in the wards in the same procedures which they have just learned in the class room, with thorough supervision by the instructor. The provision of standardized equipment, both in the class room and in the wards, has been a very considerable factor in making possible uniformity of nursing procedures, and has contributed to the accurate technic of the students observed in the wards.

The fact that students are not hurried when on duty in the wards, but, owing to the provision of ward attendants, labor-saving devices and adequate equipment, have time to carry out the procedures exactly as taught, also contributes to the uniform excellence of technic observed.

The graduate nurses in charge of wards have been appointed on account of special qualifications. The head nurse of the children's ward is a graduate of the Boston Children's Hospital; the head nurse of the obstetrical ward has had postgraduate training at the Chicago Lying-In Hospital; and the nurse in charge of the operating room is a graduate of St. Mary's, Rochester, Minnesota. Thus student nurses have the advantage of instruction given by specialists in their own departments.

St. Luke's was in the midst of reorganizing its instruction at the time of the investigation, but already had developed methods which should result in excellent correlation. For example, all procedures are demonstrated to the head nurses in the class room, in order to enlist their interest and co-operation in the teaching of students and to insure uniformity of method.

FAILURE TO CORRELATE THEORY AND PRACTICE

The varying lack of success in correlating theory and practice in nursing procedures at the other Cleveland hospitals is due to different causes.

Lack of Equipment

At the City Hospital, where exceptionally good provision is made for class room teaching, the entire lack of many essentials in ward equipment would

make it impossible to exact good nursing technic, as taught in the class room, even if there were adequate supervision of ward practice.

Lack of Organization

At Lakeside, owing to other required duties, the instructor of practical nursing has not sufficient time to supervise adequately even the probationers on the wards. Moreover, no provision is made for the immediate application of class room teaching. For some students there may be an interval of some weeks before they have opportunity to put their class room teaching into practice.

Conflict of Teaching with Administrative Duties

At four other hospitals, Fairview, Glenville, St. Alexis and Lakewood, the teaching of practical nursing is carried by the superintendent of nurses in addition to her administrative duties. This arrangement obviously does not allow enough time for either teaching or organized supervision of nursing technic. The pressing demands of purely administrative interests continually thrust into the background the apparently less immediate needs of teaching.

At two other hospitals, Huron Road and St. Vincent's, a somewhat similar interference with proper practical teaching is found. At Huron Road a head nurse is expected to give the class room and practical instruction in nursing procedure while her primary duty is management of a ward or floor. At St. Vincent's, the supervisor of the gynecological and women's medical wards was the instructor. Obviously, the successful combination of two such functions is impossible.

No opportunity was presented to see the instruction in nursing procedures at St. John's, owing to the illness of the instructor at the time of the investigation.

INSTRUCTION AT THE MATERNITY HOSPITALS

The remaining hospitals, Cleveland Maternity and St. Ann's Maternity are special hospitals, giving obstetrical training to second and third year students, and to students of advanced standing. In the case of these students, acquaintance with nursing procedures is presupposed, except in the special field of obstetrics. In addition, both hospitals offer courses of 15 months in obstetrics to women who have had no previous training in nursing. At Cleveland Maternity, demonstrations, supervision and instruction on the wards are given by graduate nurses. At St. Ann's, the teaching and supervision are below standard, since they are in large part carried out by graduates of the fifteen months' course in obstetrics only.

While far-reaching recommendations have been presented in the section on Prenatal and Maternity Nursing Service, which may by some be considered as implying unjust criticism upon the quality of nursing service now given by the Maternity Hospital, it is particularly to be noted that it is not the quality of professional care either by physicians or nurses which is criticised. It is not conceived by the staff of the Survey that among the functions of a university teaching hospital is the administering of a city-

wide prenatal service. Lack of good administrative organization, inadequacy of supervision, lack of continuity of the present nursing service for maternity cases, are the main reasons for the recommendations that the Visiting Nurse Association and not the Maternity Hospital assume the broader functions proposed. Without the initiative, the standards, the demonstrations in this field made by the Maternity Hospital medical and nursing staff, Cleveland could not now even consider such a thorough-going program of maternity care as is proposed. Cleveland's mothers owe much to the Cleveland Maternity Hospital.

OPPORTUNITIES FOR CASE STUDY

Case study is required of student nurses only at Lakeside and Mt. Sinai. At Lakeside this good feature is found only in the medical wards.

Teaching of the Fundamental Sciences*

In most schools of nursing instruction in the fundamental sciences is weak, owing to the lack of good teachers and of equipment, and the lack of preparation on the part of the students. Yet the employment of teachers is in itself an advance over former methods of instruction.

Most hospitals are equipped with one or more rooms in which it is possible for students to gather around a table, view specimens, and otherwise witness a demonstration by the instructor, of the principles to be taught. But this is not real laboratory instruction, which should provide for individual experiment and observation.

None of the eleven general hospitals studied in Cleveland is prepared to give individual laboratory instruction in all four of the fundamental science courses. Details of the equipment provided are given under each science course. None of the hospitals makes any separate allowance for laboratory supplies, demonstration material, or reference library.

Instructors are often overtasked with administrative duties. The teaching staff at Lakeside is materially hampered by the necessity of attending to many details in the administering of the school.

In five of the ten hospitals considered in this section, the same person who administers the training school is expected to carry all or at least the heaviest part of the teaching. At the City Hospital, the acting superintendent of the training school teaches 7 subjects, spending 19 hours weekly in class work in addition to the nursing administration of a hospital with nearly 800 beds. An emergency at Fairview makes the instructor also the acting superintendent of nurses, though even in normal times she shares many of the responsibilities of administering the school. At Glenville and Lakewood, the administration of the training school and the instruction of nurses is carried on by the same person. At St. John's, the superintendent of nurses carries in addition to 18 teaching hours, the administrative duties of her position in which she seems to have no assistance even for the clerical work.

* In this section St. Alexis is omitted throughout, owing to the absence of systematized instruction and of records concerning the course given during the year since this training school was started.

It needs no argument to prove that such duties cannot successfully be combined. The more pressing demands of administration take precedence; the teaching must inevitably suffer. If a higher standard of instruction is to be established, the appointment of full-time instructors is an urgent necessity. The only alternative is a central school of nursing, to which students may be sent for instruction.

(a) CHEMISTRY

Six hospitals give instruction in this subject, City, Fairview, Glenville, Mt. Sinai, St. John's and St. Vincent's. Four others, Huron Road, Lakeside, Lakewood and St. Luke's, avail themselves of chemistry courses in the nearest high schools. Lakewood pays a fee of \$80.00 for the course; the instruction for the students of the other hospitals is furnished gratis by the city, through arrangement with the Board of Education.

Method

Of the six hospitals in which chemistry is taught, three have some individual laboratory work; City, where half the time allowed is given to the laboratory, Mt. Sinai, and St. Vincent's, where only a few hours of laboratory instruction are provided. In the others, the instruction is almost wholly by lecture with occasional demonstration.

Mt. Sinai gives a preliminary course to students who have not had chemistry in high school. A more advanced course is given to all students.

The teaching of chemistry in the high schools appears to be of high grade though limited in scope.

Equipment

Of the six hospitals which provide their own course in chemistry, only one, the City Hospital, has adequate equipment for both laboratory work and demonstration. At Mt. Sinai and St. Vincent's, the supplies appear to be adequate for demonstration purposes. At St. John's, Fairview and Glenville, the equipment is inadequate for either method of instruction.

Hours

The hours devoted to this subject in Cleveland training schools are as follows: .

Lakewood.....	40 hours (High School affiliation)
Mt. Sinai.....	33 "
Lakeside.....	30 " (High School affiliation)
Huron Road.....	30 " " " "
St. Luke's.....	24 " " " "
City.....	20 "
St. Vincent's.....	20 "
St. John's.....	18 "
Glenville.....	12 "
Fairview.....	10 "

(b) ANATOMY AND PHYSIOLOGY

All of the ten hospitals give some instruction in this subject.

Method and Equipment

In one hospital, Huron Road, instruction is almost wholly by formal lectures and quizzes, with demonstrations at intervals; in the others, mainly by recitations on assigned texts with some demonstrations. In only two hospitals, Lakeside and Mt. Sinai, is there in addition some individual laboratory work, though the equipment is very meagre.

Hours

The hours given to this subject in Cleveland training schools are as follows:

Lakeside	70	hours
Mt. Sinai.....	62	"
St. Vincent's.....	60	"
St. Luke's.....	56	"
Huron Road.....	51	"
City.....	50	"
St. John's.....	50	"
Glenville.....	40	"
Lakewood.....	36	"
Fairview.....	30	"

The time allotted to anatomy and physiology in 4 schools outside of Cleveland is as follows:

University of Cincinnati	150	hours
University of Minnesota.....	144	"
Johns Hopkins.....	110	"
Children's (Boston).....	100	"

(c) DIETETICS

[Of the ten general hospitals eight give some instruction in this subject, i. e., City, Fairview, Glenville, Huron Road, Lakeside, Lakewood, Mt Sinai and St. Luke's. Two other hospitals, St. John's and St. Vincent's, send their students to the Y. W. C. A. for instruction in this subject. With the exception of Lakeside and St. Luke's, all these courses strongly emphasize cookery, and give a minimum amount of instruction in the basic principles of nutrition.

This failure is all the more serious owing to the growing recognition of the primary importance of nutrition, especially in relation to children and the movement for Child Welfare in which nurses bear increasing responsibility.

Equipment

Lakeside and City have good laboratories fitted for teaching dietetics although at the City it is not adequately supplied with individual utensils

Huron Road the laboratory is fairly adequate. The remaining five hospitals provide decidedly inferior equipment for teaching this subject. In some instances the room provided is unsuitable (such as the main kitchen at St. Luke's), and in others there is a lack of utensils for individual work.

Hours

The time allotted to this subject in Cleveland training schools is as follows:

Mt. Sinai.....	60	hours
Lakeside.....	52	"
St. Vincent's.....	45	"
St. John's.....	45	"
St. Luke's.....	44	"
City.....	40	"
Huron Road.....	40	"
Fairview.....	32	"
Lakewood.....	25	"
Glenville.....	24	"

In four schools outside of Cleveland the hours given in dietetics and bakery are as follows:

University of Minnesota.....	70	hours
Philadelphia General.....	66	"
Children's (Boston).....	56	"
Boston City.....	56	"

(d) BACTERIOLOGY

All of the hospitals give some instruction in bacteriology, but in none is the equipment adequate for the individual laboratory work essential for this subject.

Equipment

Material for demonstration in bacteriology is good at Mt. Sinai, and fairly good at Lakeside and St. Vincent's. At all the other hospitals this equipment is very meagre.

Hours

The time devoted to this course in Cleveland training schools is as follows:

St. Luke's.....	36	hours
Huron Road.....	24	"
Mt. Sinai.....	21	"
City.....	20	"
Lakeside.....	20	"
St. Vincent's.....	20	"
Fairview.....	12	"
Glenville.....	12	"
Lakewood.....	11	"

At St. John's, this course is combined with hygiene.

In four schools outside of Cleveland, the hours given in bacteriology are as follows:

University of Minnesota.....	99	hours
Children's (Boston)	76	"
University of Cincinnati.....	75	"
Presbyterian (Chicago).....	70	"

Method

In only one of these, Mt. Sinai, is individual laboratory work given, and even there with inadequate space and too meagre equipment to make this form of instruction effective. The course is divided into half laboratory and half recitations on assigned texts.

Lakeside, which has no laboratory work, could probably arrange for it by utilizing more extensively the possibilities of the pathological department of the hospital. Half of the course at Lakeside is devoted to demonstration by the instructor and half to lecture and recitation.

At the other eight hospitals, the method of instruction varies, being mostly demonstration at St. Luke's and St. Vincent's, and mostly lectures at Fairview and Glenville. The others combine these methods. At St. John's the work in bacteriology is not given as a separate course, but in combination with the course in hygiene.

Instruction in Other Subjects

The length of the course is only one factor, and by no means the most important factor, in determining the value of the instruction. Yet the proportion of time devoted to various groups of subjects is highly indicative.

Comparisons of the time devoted to instruction in the more advanced subjects are difficult to make, since the classification and arrangement of subjects show wide variation. Thus, in one school the lectures on gynecology are included in the course in surgical diseases, in another in the course in obstetrics, and in others, as a separate series. In the same way the lectures in operating room technic, orthopedics, and eye, ear, nose and throat diseases are sometimes given as separate courses, and at other times included in the general surgical lectures.

In the same way, it is difficult to make comparisons of instruction in the different branches of medicine. Thus, communicable diseases, nervous and mental diseases, occupational diseases, venereal and skin diseases, and pediatrics, are given as separate courses in some schools, and in others two or more are combined into a single course. In one, all these subjects are given as one course, under the title of medical diseases.

Notwithstanding these differences in classification, comparisons can fairly be made between groups of allied subjects. Thus, we may combine in one group under the general title of surgical subjects the following: eye.

ur, nose and throat diseases, gynecology, operating room technic, orthopedics and surgical diseases. The number of hours of instruction given to these surgical subjects in 9 Cleveland training schools, ranges from 34 to 73. One school cannot be included, since in that school gynecology is included in obstetrics.

Again, comparisons may fairly be made by grouping under the single head of medical, the following subjects: communicable diseases, medical diseases, nervous and mental diseases, pediatrics, and venereal and skin diseases. In this group of medical subjects, Cleveland schools give from 52 to 109 hours of instruction.

HOURS OF INSTRUCTION IN THREE GROUPS OF SUBJECTS

	Medical	Surgical	Preliminary Sciences	TOTAL All Subjects
City.....	90	43	130	472
Fairview.....	61	34	76	365
Glenville.....	56	48	88	365
Huron Road.....	82	65	122	596
Lakeside.....	92	70	162	672
Lakewood.....	54	59	112	469
Mt. Sinai.....	52	*	176	655
St. John's.....	109	73	148†	598
St. Luke's.....	62	44	140	572
St. Vincent's.....	88	60	145	505

In obstetrics the hours given range from 12 at St. Luke's to 31 at Huron Road. Except for Lakewood, which gives 18 hours, the time devoted to this subject in the other hospitals is from 20 to 30 hours.

The total number of subjects listed in the curricula of the Cleveland training schools ranges from 17 to 29, in addition to the four fundamental sciences already considered. These four sciences, viz. anatomy and physiology, bacteriology, chemistry, and dietetics and cookery, may be considered as preliminary subjects, or those introductory to the specifically technical and professional work to follow. In nursing schools already affiliated with colleges and universities, the tendency is to consider these subjects prerequisite to the strictly professional training.

It is significant that the Cleveland hospitals devote to these four subjects from 20% to 28% of the total time devoted to class instruction, leaving only from 72% to 80% to the subjects that constitute the main body of professional instruction. It is instructive to compare, for example, the time devoted to the group of medical subjects, which ranges from 8% to 19% of the total time allowed for class room instruction, or to the group of surgical subjects, which ranges from 7% to 13%, with the time devoted to the preliminary group which ranges from 20% to 28%. When it is recalled that the time allowed for the preliminary subjects, though large in proportion to

* Figures not comparable, since gynecology is included in course in obstetrics.

† Includes a course in hygiene which is combined with bacteriology.

the total hours of instruction, is in reality meagre, the disproportionate time allotted to purely professional subjects is a still more serious indication of the inadequacy of the curriculum.

This fault, common to nursing schools in general and not peculiar to Cleveland schools, illustrates the emphasis that has universally been placed on the manual side of the nurses' training, to the exclusion of sufficient class room instruction.

PROPORTION OF TOTAL CLASS HOURS DEVOTED TO MEDICAL AND SURGICAL GROUPS COMPARED WITH PROPORTION DEVOTED TO PRELIMINARY SCIENCES*.

	Medical	Surgical	Preliminary Sciences
City.....	19%	9%	27%
Fairview.....	16	9	20
Glenville.....	15	13	24
Huron Road.....	13	10	20
Lakeside.....	13	10	24
Lakewood.....	11	12	23
Mt. Sinai.....	8	†	26
St. John's.....	18	12	24
St. Luke's.....	10	7	24
St. Vincent's.....	17	12	28

Method of Instruction

In the presentation of most of the purely professional subjects three of the hospitals, Fairview, Glenville and St. Luke's, rely mainly on the lecture method. In the other hospitals there are recitation periods in connection with most of the lecture courses. At two hospitals, Lakeside and St. Vincent's, periods are, in many subjects, set aside for demonstration.

The courses in psychology and venereal and skin diseases, however, are purely lecture courses except at St. Vincent's where recitations and demonstrations are given. Likewise, the course in mental and nervous diseases is taught entirely by lecture except at Lakeside, Mt. Sinai and St. Vincent's.

The correlation between class and ward instruction in Cleveland training schools seems on the whole to be as carefully planned as in other schools of comparable standing. As long as students staff the wards at need, complete correlation of theory and practice is probably impossible. Yet in many instances in Cleveland there was evident failure to come as near as possible to the best practice. Thus, with the exception of St. Vincent's, the classes in surgical diseases and medical diseases are given in the student's second year in the school, after she has presumably for many months had the care of both medical and surgical patients.

The difficulty encountered by small schools in giving proper instruction to their students is illustrated by Lakewood which is unable to give all

* Other subjects not specified in the composition of these groups are omitted in this section.

† Figures not comparable since gynecology is included in course in obstetrics.

nurses each year, since the number of students in each class is small. For example, the course in anatomy and physiology is given in alternate years. Thus instruction in this fundamental subject is not given to some students until their second year. In the same class, therefore, are students in the second year, first year, and preliminary period. These last are the only students who receive this instruction at the time when it should properly be given.

The advantages that would result from combining with other schools are obvious.

In all of the Cleveland schools* important courses are given in the evening, a highly undesirable practice. Evening classes not only deprive students of time for recreation, but also require mental activity when students are fatigued from the day's work in the wards.

St. Vincent's makes extreme demands upon its students in this respect. In this hospital 94 hours of class instruction are given after six o'clock in the evening. In this evening work is included all or part of the following courses: bandaging, massage, medical diseases, surgical diseases, obstetrics, eye, ear, nose and throat diseases, venereal diseases, psychology and ethics. Three other hospitals, Fairview, Glenville and Lakeside, give 50 hours of instruction or more in the evening.

CONDITIONS OF WORK

Ratio of Nurses to Patients

The ratio of student nurses to patients which is desirable for teaching as well as for efficiency of service, is influenced by differing conditions in different services and even in different wards.

The best general opinion places the desirable ratio in an active ward service at about 1 nurse to 5 patients on day duty; 1 nurse to 10 patients on night duty.

In Cleveland, of the 8 hospitals for which information is available, 5 hospitals meet this desirable ratio for day duty. These hospitals are: Huron Road, Lakeside, Mt. Sinai, St. John's† and St. Luke's. Of the remaining three hospitals, Fairview and St. Vincent's fall short, having a ratio of 1 nurse to 8 patients, while the City Hospital provides only half the requisite number of student nurses. This lack is in part supplemented by helpers in some wards.

For night duty, only 1 hospital, St. John's, comes up to the desired figure. The others range from 1 nurse to 12 patients at Mt. Sinai, to 1 nurse to 27 patients at St. Vincent's. At the City Hospital, the ratio was given as 1 to 5, but examination of the hospital's own records showed on the night of January 22nd that it had been possible to provide only one nurse to 40 patients.

* Information on this point was not obtained from Huron Road.

† On the day of inspection a lower ratio was found, i. e. 1:9.7 on medical floor; 1:8 in women's surgical ward.

The ratio of students to patients in private service must necessarily be higher because this is a room service. According to the standard, 1 nurse to 3 patients is correct for day duty; 1 nurse to 5 patients at night. In almost all the hospitals the ratio either just meets or falls slightly below the desired figure for day duty. Night duty shows a wider deviation from the standard, St. Vincent's providing only 1 to 16 patients.

HOURS OF DUTY

1. Day Duty

In the past, the failure of the training schools as educational institutions has been due largely to the excessive hours of labor required. To state the case is to prove it. To expect study or intelligent application from students is manifestly impossible in addition to the "nine-to-ten-hour working day, the twelve-hour night and the seven-day week," which, according to the standard curriculum, is "still required in most hospitals." During the past year the introduction of the eight-hour day has made marked advances.

EIGHT HOURS

In Cleveland three of the thirteen training schools have nominally an eight-hour day. These are Huron Road (where there is, however, a nine-hour day in private service), Lakeside and Mt. Sinai. This good showing is, however, lessened by the fact that in all three hospitals class work and study and meal times fall, as is customary, in the students' so-called "free off-duty time." At Mt. Sinai class work exceeding one hour per day is counted as time on duty, at Huron Road extra time is allowed off "when possible." At all three hospitals one half-day off is given on Sundays. In some services there are additional hours off on Sunday. All three hospitals give one half-day off weekly.

EIGHT AND ONE-HALF TO NINE HOURS

At the City Hospital the hours of duty range from $8\frac{1}{2}$ to 9, and are reduced to $4\frac{1}{2}$ on Sunday. Class time is occasionally counted as time on duty. A half-day weekly is allowed.

NINE HOURS

The remaining nine hospitals have a nine-hour day on five days of the week. All give one-half day off per week and vary in their hours on Sunday, St. John's and St. Vincent's having nine hours*, and the others ranging downward to four and a half.

It should be noted that at Fairview and Lakewood, class time is counted as time on duty, and at Glenville this is occasionally done. In consequence, the work on the wards at these 3 hospitals is often less than nine hours, particularly in the junior year. At St. John's juniors have only 8 hours on the wards.

* On every third Sunday hours of duty reduced to 2 and 1 1-2 hours respectively, at these two hospitals.

2. Night Duty

The educational value of night duty lies in part in the added responsibility and initiative which it entails for the students. Obviously, however, the benefit of this service is obtained at the cost of added physical and nervous strain. The assignment to night duty should, therefore, be neither too long in duration nor too frequent; and careful provision should be made to provide the students on night duty quiet and privacy for sleep in the day. These primary precautions in the interest of health and education are often to be ignored. Moreover, the study of individual students shows frequent examples of exceeding the period of time planned for night

Night duty should be assigned with special reference to the nursing experience to be obtained which may obviously be great in medical and obstetrical services, but is negligible in a surgical service.

Length and Frequency of Night Duty

EIGHT HOURS

At Mt. Sinai and Fairview have eight-hour duty. At all three hospitals the term of the service is nominally two months. Mt. Sinai succeeds in keeping night duty substantially within the limits set for it, but at the other two hospitals continuous periods of night duty though not intended to exceed two months, have in fact, according to the hospital records for the present senior class, run as long as 16 weeks. No data on this point were obtained from Cleveland.

At Mt. Sinai and Fairview plan three periods of night duty, Mt. Sinai four, and Cleveland six respectively, lasting respectively six and eight months.

OVER EIGHT HOURS AND LESS THAN TWELVE

Four hospitals fall in this group.

Cleveland City requires nine and a half hours night service, with one hour off for a night lunch. The term of duty here is only two weeks at a time.

Cleveland Maternity and Glenville have 10 hours, Glenville having six periods of six weeks each, totalling nine months.

Iron Road has 11 hours in periods of one and two months, totalling nine months. This hospital gives one night off duty per week.

TWELVE HOURS

Five hospitals have a twelve-hour night, with a half hour off for a night

These hospitals are Lakewood, St. Alexis, St. John's, St. Luke's, and St. Vincent's. Of these, two have a half-night off at regular intervals, Lakewood monthly, and St. John's fortnightly. The term of duty ranges from periods of eight weeks each (or nearly a year) at Lakewood, to three or four more periods of one month each at St. Alexis.*

*At the 13th hospital, St. Ann's, affiliating students are not assigned to night duty.

CLASSES DURING NIGHT DUTY

Lack of consideration for the students' health and study is apparent in the custom of holding classes in the early morning or at early afternoon hours, before the nurses have satisfied the primary need of sleep.

In six of eleven hospitals in Cleveland, there are early morning classes for students on night duty. These six hospitals are: City, Glenville, Huron Road, Mt. Sinai, St. Luke's, and St. Vincent's. One hospital, Fairview, has classes in the early afternoon at two o'clock. The four remaining hospitals, Lakeside, Lakewood, St. Alexis and St. John's, have classes at a more reasonable hour, that is, after three o'clock.

TIME OFF AFTER NIGHT DUTY

The strain of night duty is often recognized by allowing a brief vacation, after each term of service. With the single exception of Lakeside, this custom is followed by the Cleveland training schools. The time off varies from one to two and a half days. At St. Vincent's three days off are given.

SLEEPING QUARTERS FOR NIGHT NURSES

To afford quiet and privacy for rest during the day to the students on night duty, special rooms or dormitories should be provided for them. Four hospitals, St. John's, St. Vincent's, City and Cleveland Maternity, have such an arrangement. In the other hospitals little effort is made in this direction. As most rooms are double, it may frequently happen that a day and a night nurse share a room. An attempt is made to put room-mates on night duty at the same time, but this is difficult and often impossible to arrange.

Vacation

With four exceptions, Cleveland training schools give a 3-weeks' vacation each year. The schools which allow only 2 weeks for vacation are the City, St. Alexis, St. Vincent's and St. Luke's.

Provision of Ward Helpers

One of the most obvious wastes of the student's time and energy in the present organization of training schools is the excessive amount of housework required, and the failure to supply ward helpers.

The hospitals in Cleveland differ greatly in this respect. In most of them it is taken for granted that the student nurse performs a large part of such duties. From actual observation in the wards it appears that with the exception of one hospital, from two to eight hours daily are spent by student nurses as occasion arises in non-educational duties such as:

Making surgical supplies.

Running sterilizer.

Cleaning and mending gloves.

Dusting and cleaning wards and service rooms and rooms of private patients.

Folding and putting away linen.

Setting and carrying trays, washing dishes.

Washing soiled linen, tending switchboard and front door.

At Lakeside 3 probationers and 3 advanced students are regularly assigned to the gauze room where three-quarters of the time is spent in the line preparation of surgical supplies. It is planned that each student will spend a month and a half in this service which can scarcely have any educational value after the first two weeks, and comes appropriately in the stationary period.

The only considerable attempts to relieve the nurse by providing ward helpers are at Huron Road and, to a greater extent, at Mt. Sinai, where the students devote more time to strictly nursing duties than in other hospital wards. At Mt. Sinai the installation of thoroughly modern equipment has simplified the problems of housekeeping in general. The work involved in caring for patients is reduced to a minimum by the liberal provision of portable equipment and by the introduction of labor-saving devices.

Moreover, the students' time is saved at this hospital, by employing attendants to perform a multitude of routine duties, which have been learned by the students during the preliminary period and are educationally valueless to them at a later stage.

The failure of other hospitals to supply such service makes the example of Mt. Sinai and Huron Road all the more noteworthy. It is worth while to describe the arrangement for ward helpers at Mt. Sinai in some detail. On the private floors attendants are employed to do all dusting, caring for flowers, answering the telephones. Half an hour before meals, they set trays in the kitchen, the nurse serving only the hot food. The attendant carries food to and from the patients' rooms. In the afternoon she is employed in making surgical supplies. The attendant works 8 hours per day, and receives \$40.00 per month and one meal a day. In the public wards lay helpers are employed only during vacation period.

In the surgical supply room two full-time women are employed at \$50.00 per month with three meals a day, and two part-time women three hours per day. These women were employed as diet kitchen maids at \$25.00 per month, and asked to be employed in the surgical room at their hours off in the afternoon. In the operating room one full-time woman is employed at \$50.00 per month and three meals a day. She cleans instruments and the room, and makes surgical supplies.

In the obstetrical department ward helpers do the same general duty as in the other wards. In addition, the attendant has charge of all cleaning, sweeps and dusts the nursery, and holds the babies during supplement-feeding. Thus, the housekeeping duties of the students are reduced to a minimum, such as scrubbing babies' individual basins, and sterilizing them. While students are supposed to make surgical supplies in spare time, as noted that in fact, their time was fully occupied with strictly nursing duties.

Undoubtedly the elimination of routine housekeeping duties and other non-educational tasks has done much to foster the study by student nurses of cases on the wards, and their unusual intelligence in discussing these cases.

But even at Mt. Sinai it is estimated that the student may spend daily one and a half hours folding and putting away linen and about an hour cleaning wards and service rooms, and the unique opportunities of the dispensary as a training field are only partly utilized because students' time there is more than half filled with routine cleaning and arranging supplies.

LIVING CONDITIONS

THE NURSES' RESIDENCE*

To counterbalance the strain of abnormal conditions met in the hospital wards, the student nurse needs the relief of outside interests and a wholesome home life. These needs are too often left unprovided for when the nurses are lodged in ordinary houses improvised as homes for a large student body without proper bedrooms or lavatory equipment, and without any special rooms for study or recreation.

If the nurses live in the hospital building, they do not have sufficient opportunity to shake off the ward atmosphere. Even mild social recreations are often made impossible by the close proximity of the patients. The nurses' residence should, therefore, be a separate building in the near vicinity of the hospital. It should be constructed to meet the needs of a nurses' home, with reception and recreation room, library, class room, study room and single bed rooms, with proper lavatory equipment and such accessory rooms as kitchenette, laundry and sewing room, exclusively for the use of the students.

In Cleveland all of the hospitals but two, house their nurses in separate buildings. These two are Lakeside and Huron Road, which set aside a separate wing with the entrance through the hospital. At St. Vincent's and St. John's, although there is a separate building, it is reached only through the hospital, and is undesirably located in the rear.

The nurses' residence at the City Hospital is the only nurses' residence in Cleveland which is satisfactory. The other nurses' homes were originally built for other purposes. Four of these, Huron Road, Mt. Sinai, St. Alexis, and St. Vincent's, provide no nurses' reception room. Four, Glenville, Lakewood, St. Alexis and St. John's, provide no separate recreation room. None have a room set aside for study.

The general and reference libraries are inadequate at City, Lakewood, St. Alexis and St. John's, either on account of lack of books and magazines, or owing to their inaccessibility.

Two Cleveland hospitals, Lakeside and St. Luke's, have a social director for the students.

In the nurses' homes in Cleveland, the double room is the rule, the single room the exception. Even more undesirable than the double room is the

* Cleveland Maternity and St. Ann's omitted in this section.

itory. Six of the eleven nurses' homes visited, lodge some of their students in dormitories. At St. Vincent's sixty-five, of a possible eighty-students, are housed in dormitories having from three to ten beds each.

Obviously, the nurses' residence should have adequate hygienic surroundings for the nurse and provision for personal hygiene and immaculate cleanliness. Ample lavatory facilities are a necessity, the provision of one bath to six students being regarded as the minimum requirement. The nurses' residence at the City Hospital is excellent in this respect, and, in addition, stationary basins are provided in each room. There is also a large lavatory adjacent to the dining room, though by a curious omission there are no toilets in this lavatory.

The other institutions make fairly adequate provisions with respect to personal lavatories, excepting St. Luke's and one floor at St. John's.

DIETARY

Since student nurses are engaged in arduous physical and mental work, careful selection of their food is a matter of prime importance. This appears to receive reasonable consideration in the Cleveland hospitals.

The nutritional value of attractive service should not be overlooked. A cafeteria service, three meals a day for three years, is not satisfactory, especially in the case of persons who must be on their feet long hours every day. In Cleveland three of the hospitals, Lakeside, Lakewood and Mt. Sinai, rely on cafeteria service, good of its kind. Under existing labor conditions, it is justifiable, but it should clearly not be a permanent feature of nurses' dining room.

RECOMMENDATIONS

1. A UNIVERSITY SCHOOL OF NURSING

It is strongly urged that a University School of Nursing be established at the earliest possible date. This school should be on the same academic basis as are other undergraduate schools of the University. The instructors should be members of the University.

All students should fully meet the usual requirements for admission, and the community and hospital course should lead to the Bachelor of Science degree. Theoretical instruction, both in class-room and laboratory, should be given by the school.

In order to obtain the necessary ward practice, the training school should make contracts with the several hospitals whereby the latter should agree to receive students for training in specified branches of nursing. Affiliating hospitals should be required to meet standards of instruction and conditions of work established by the University, in order that the training shall be of grade equal to that furnished in practice fields of other schools of the University.

Time must necessarily elapse before a University School of Nursing can be successfully planned and launched. In the interval the Cleveland Training Schools should take immediate steps to improve the present course of training.

The recommendations which follow embody some of the obvious changes needed to improve working and living conditions for the student nurses and to strengthen the instruction now given.

The recommendations as to the content of the curriculum and the relative length of courses are not here given. On these points it has not yet been possible to formulate conclusions, as noted earlier in this report (see page 712). Studies of hospital training schools in other cities, of which the Cleveland Survey has been one, are now in progress, by the Committee on Nursing Education. From detailed observation of the ward experience and instruction of students in different types of hospitals, material is being gathered on which the Committee will base its ultimate recommendations for a detailed curriculum.

The recommendations which follow will, it is believed, not only improve the training but will help to attract students of higher calibre, who have been repelled by the unnecessary physical hardships and inferior instruction of the present training schools.

2. ORGANIZATION OF THE TRAINING SCHOOL

Various proposals as to the organization of training schools are presented in detail on page 713 of this chapter and need not be repeated here.

Cost Accounting

A separate and detailed budget for the training school should be prepared, and a system of cost accounting should be adopted to show the total cost of the training school, including instruction, maintenance, etc., and covering the value of services rendered by the students and staff of the school.

Money Allowance to Students

Cleveland training schools should abandon the practice of paying students, and should use funds thus released to build up their educational work.

Payment to Lecturers

The growing practice of paying the members of the medical staff who teach in the school of nursing should be generally adopted.

3. MINIMUM ENTRANCE REQUIREMENT

The minimum educational requirement for admission to a school of nursing should be not less than completion of high school.

4. SERVICES OFFERED

Hospitals which cannot offer adequate clinical facilities for instruction in the four main branches (medical, surgical, children's diseases and obstetrics), as well as in the important special branches of communicable diseases and mental and nervous disorders, should provide such opportunities for their students by affiliation with institutions capable of offering them.

It is urged that all students who expect to enter public health work should be allowed to elect the eight months' course, but at the least they should be allowed the four months' period of training in the University District.

Dispensaries and social service departments should be utilized for training students, as soon as adequate teaching and supervision are assured.

5. INSTRUCTION

Instruction in the fundamental sciences and in the other necessary branches can best be afforded by a central training school, under University auspices, such as is recommended above.

If such University affiliation should not prove feasible, or if there is delay in joining it, it is recommended that several training schools of similar grade in Cleveland combine in furnishing theoretical instruction to their students. No lower educational requirement for admission should be accepted than that required for University entrance.

Teaching of Nursing Procedures

Whatever combination with other schools may be made in the future, whether under University or other control, it is clear that a demonstration room and equipment for teaching nursing procedures will continue to be needed in every hospital that admits students for training. It is therefore urged that every school not now so supplied for demonstration and individual practice, should provide these needed facilities without delay.

The technical work of probationers and also of more advanced students should be supervised by the instructor. Every student should be carefully taught each nursing procedure in the class room before she is allowed to carry it out on the wards. Moreover, each student should be supervised by the instructor when she carries out any procedure for the first time, and she should not be assigned to any duty regularly until the instructor has made sure that she is proficient, and has notified the head nurse to that effect. Procedures should be demonstrated to head nurses by the instructor.

Similarly, the teaching of diet in disease must always be given at least in part within the hospital in order to correlate class instruction with the actual feeding of patients on the wards. It is therefore urged that every hospital not now possessing adequate classroom and laboratory facilities for the teaching of diet in disease should provide these facilities immediately. Equipment similar to that needed for teaching dietetics is needed.

Teaching of Fundamental and Technical Subjects

Prior to the establishment of a central school of nursing various immediate improvements in teaching and equipment should be made in the fundamental sciences and the technical subjects. These improvements have been indicated in separate reports to the different hospitals.

6. CONDITIONS OF WORK

Neither day nor night duty should exceed eight hours out of the twenty-four. Class hours should be included in this time. Students on night duty should in no case have classes until after a period of at least eight hours has been allowed for sleep. Night work should be limited to short terms of not more than one month each. To compensate for the strain of night work a brief vacation should be given at the completion of each term.

7. LIVING CONDITIONS

The provision of suitable living conditions and opportunities for recreation are urged as matters of first importance.

The nurses' residence should be separate from the hospital, but in close proximity to it. It should contain reception and recreation rooms, library, class and study rooms, and accessory rooms for the exclusive use of the students, such as kitchenette, laundry and sewing rooms. Students should have single bedrooms, and there should be generous provision of bathrooms and lavatories.

For students on night duty special sleeping rooms should be provided, which should be situated so that quiet and freedom from disturbance are assured.

Special attention should be given to providing recreation, both indoors and out. Facilities for indoor recreation might well include a gymnasium and swimming pool, and should, at the least, include good facilities for dancing. If space permits, tennis courts should be provided for the exclusive use of the nurses.

It is recommended that social directors should be appointed, who should be charged with directing the recreation and social life of the students.

8. REDUCTION OF PRESENT THREE-YEAR COURSE

With the practical development of the recommendations given above it should prove possible to reduce the present three-year course for all nurses. At this time, for the reason given above (see page 712), it is not possible to make specific recommendations as to the amount of time by which the regular nurses' training may safely be reduced. The higher standard of admission, the elimination of uneducational house work, better instruction, practical and theoretical, a better balanced provision of services, will enable the course to be reduced by at least eight months.

The principles underlying such reduction of the present three-year course are two:

1. That all nurses-in-training should have the same basic education, after which they may be graduated with the certificate or diploma of nurse;
2. That in addition, courses should be provided leading to special diploma for public health nurses, for teaching and administrative positions in hospitals, and for specialties in private duty.

This plan is proposed in the belief that nurses graduating from the shorter basic training will be available primarily for bedside care. The more advanced courses will attract students of higher calibre who are needed for the nursing specialties, especially for teaching and administration in hospitals and for public health work. It is the conviction of the Nursing Survey that without a thorough clinical training the responsible duties in these rapidly developing fields cannot be successfully met.

9. TRAINING OF COLORED STUDENTS

The question has recently been raised as to providing opportunities for colored students to obtain the nurses' training in Cleveland. At one hospital—the City Hospital—this is a question of practical moment. There can be no doubt that at the City Hospital, where the training school is maintained by the city, all citizens have equal rights. The

afforded by the city should therefore be available for all students, irrespective of race. So far as concerns living arrangements at the hospital, the possibility of friction may be removed by following the custom of allowing colored students to live at home during their training.

Post Graduate Courses

WESTERN RESERVE UNIVERSITY COURSE IN PUBLIC HEALTH NURSING

ORIGIN

The impulse that led to the founding and development of this course came from a group of lay women interested in the Visiting Nurse Association.

To them it became apparent, as visiting nursing broadened from remedial work into constructive efforts for family health, that the preparation afforded to nurses by hospital training schools was not adequate to prepare them for the social and preventive work required in this newly developing branch of nursing. Additional instruction both in the classroom and in the field was clearly needed.

With the same vision and energy from which Cleveland has richly profited from various forms of nursing and health work, plans for a course of training were made and put into effect. For 5 years the course thus established was managed by the Visiting Nurse Association, with the assistance of the Department of Sociology of Western Reserve University, the Associated Nurses, the Anti-Tuberculosis League, the Babies' Dispensary and Hospital, and the Department of Medical Inspection of the Board of Education. The Visiting Nurse Association took the financial and administrative responsibility, secured a director, and set aside as a practice field the area now covered by the University Public Health Nursing District.

As the work of training developed, it became clear that direction might more appropriately be exercised by an educational institution than by an association organization. After 5 years, therefore, the Visiting Nurse Association transferred the management of the course to the University, and it became a constituent part of the Division of Health Administration, School of Applied Social Sciences.

ORGANIZATION

The organization effected was excellent. By becoming an integral part of the University, the stability and educational purpose and standards of the course were assured. At the same time, through the appointment of an advisory committee and the establishment of the University Public Health Nursing District, the course has maintained its close connection with public nursing activities, and has secured a unique field for the instruction of students in practical work.

The Advisory Committee is composed of 13 members, of whom a layman is chairman. The superintendents of nurses of the following organizations are members: the Division of Health, the Board of Education, the

Visiting Nurse Association, and the Babies' Hospital and Dispensary. The Dean of the School of Applied Social Sciences is also a member, and the others are lay women representative of the group to whom Cleveland owes much of its progress in various branches of health work. The Director of the course is secretary of the Committee. So long as such a group forms its policies and directs its activities, the maintenance of proper balance between theoretical and practical work seems assured.

The University Public Health Nursing District is perhaps the most potent single factor in rendering the course one of the best in the country. This crowded district was selected as a practice field on account of the varied experience it affords for public health nursing. The course is planned on the principle that the students for effective training must not only observe the work of others, but must themselves carry responsibility, under expert supervision, for actual practical work. The plan presupposes that field work corresponds to laboratory work in other departments of the University, and that it should, therefore, be controlled by the School in order that it may be carried on according to sound educational methods.

With the exception of school nursing, the work in the University District is almost entirely generalized. This arrangement is of great value to the student, since it eliminates the waste of time inevitably resulting from assignments of work distributed among several different agencies. But still more important, it teaches the student methods of dealing with every type of health problem encountered in the families she visits, and thus forms an excellent preparation for community work. In post-partum work, however, the opportunities are meagre, since much of this service at the present time is carried by the nurses of the Cleveland Maternity Hospital.

The organization of the University District, and the character of the field work are described in a special report.

FINANCES

The budget is prepared by the Advisory Committee. Expenditures must be approved by the Committee.

The expenses of the course, above receipts from tuition fees, are met by the University and contributions from the Visiting Nurse Association and the Anti-Tuberculosis League. The Board of Health gives the supplies used for its own especial activities in the district, but is not empowered to appropriate funds for the work of a private organization.

STAFF

The teaching staff consists of the director, 5 nurse instructors in the University District, the instructors in the several courses given by the School of Applied Social Sciences and a number of lecturers.

The director of the course holds the appointment of Assistant Professor in the University, and teaches one course. She is directly responsible to the Dean of the School and to the chairman of the Advisory Committee. In addition to administering the work of the course, she is responsible for de-

ailed supervision of the work of the University District. She also lectures in training schools, serves on the Central Committee on Public Health Nursing, and in her official as well as personal capacity she is called upon to advise and assist in many nursing activities in the community. It is clear that the responsibilities of her office are many and heavy.

The work of students in the University District is directly supervised by the five instructors. These nurses, all of whom are graduates of the course, have been selected for their ability to teach and to supervise. That their work is of a high order is shown in the report on the University District. One of the instructors acts as assistant director in addition to her other duties. Her responsibility for administration is however limited except during the absence of the director.

STUDENTS

For admission to the course, applicants must be graduates of approved training schools for nurses, and must be eligible for membership in the National Organization for Public Health Nursing. They must also be graduates of high schools, or have received an equivalent preliminary education. To the latter requirement, however, a number of exceptions have been made.

Application for admission to the course is made on the regular blank of the School of Applied Social Sciences. Since this blank calls for no details of the nurse's training, it is not especially well adapted for this group of applicants. Letters are sent to the high school and nurse's training school attended by the applicant requesting a general statement in regard to her work and her personal qualifications. Three personal references are also required, and to each of the persons whose names are given, a letter of inquiry is sent.

Credentials of applicants are evaluated by the Advisory Committee in conference with the Director of the Course and the Dean of the School. The final decision in regard to admission is made by the Dean.

Students who complete the course satisfactorily receive certificates.

Students not registered for the entire course are admitted for four months of training in field work. No certificates are granted for this work, but those who complete the work satisfactorily receive 15 points of University credit. These students must have the same professional and educational qualifications as those taking the full course.

Pupil nurses from any training school meeting the standards set by the Ohio State Association of Graduate Nurses may be received for two months' experience in the University District. These pupils must have completed two years of training, and must have had their training in surgery, and in obstetrics, if possible.

During the year ending June 1, 1920, the following number of students was enrolled:

One-Year Course, Graduate Nurses.....	19
Four Months' Field Work:	
Graduate Nurses.....	31
Pupil Nurses.....	11
	—
Total.....	61

Sixty-four pupil nurses were received for two months' training. These pupils were admitted monthly, the number varying from 5 a month during the summer months to 10 a month during the winter.

The total number of nurses, not including those who graduated in 1920, who have received certificates, is 45.

INSTRUCTION

One regular course is offered, which leads to a certificate. It extends over one academic year, and is divided into two parts, one devoted largely to didactic work, the other to field work.

The didactic work is given during the first semester, and consists of the following courses:

Public Health Nursing.....	30 hours
Hygiene and Preventive Medicine.....	24 "
Bacteriology.....	96 "
Household Problems.....	29 "
Practical Sociology.....	60 "
Problems in American Society.....	30 "
Case Work with Families.....	72 "
Mental Hygiene.....	10 "

During the first semester the students spend two afternoons (6 hours) weekly in work with the Associated Charities.

Additional courses may be taken by students exempted on the basis of previous work from one or more of these courses. During the year 8 students so exempted took courses in psychology, government and social legislation.

The character of the didactic work of the course could not be judged, since the investigation was carried on in the second semester, after the lectures had been concluded. It was, therefore, impossible to evaluate the class room teaching. The subjects selected, however, are those specially needed by nurses preparing for public health work.

FIELD WORK

One semester, or approximately 4 months, is spent in field work. Ordinarily, this work follows directly after the semester devoted to theoretical work. The field work is, however, given three times during the year. In

in some cases the students take field work in the summer months, and begin theoretical work subsequently.

The usual division of field work is the following:

University District.....	11 weeks
School Nursing.....	3 weeks
Hospital Social Service or Humane Society, or other Special Agency (observation).....	1 week
Industrial Nursing (observation).....	1 or 2 weeks as elected
Rural Nursing (observation).....	1 or 2 weeks as elected

During the first week a number of excursions are made in order to acquaint the students with Cleveland social agencies and social workers.

In the University District students carry on the usual activities of the visiting Nurse Association, and the nursing work of the Department of Health, in which anti-tuberculosis work and infant welfare work are included.

SUPERVISION IN THE UNIVERSITY DISTRICT

To each instructor is assigned a number of students, including both graduate and pupil nurses. Seven is the maximum number of students assigned to one instructor. Each student is assigned by her instructor to a subdivision of the district, and as her knowledge and skill develop, she is increasingly held responsible for the work in her particular section.

When students begin their field work, they are taken out one at a time (or occasionally two at a time) by the instructor, who gives the instruction at the home and does the work required, while the student observes. A rough discussion of the visit follows. On a subsequent visit the roles are reversed, the instructor observing while the student conducts the visit. This procedure is repeated with different types of visits, such as to prenatal cases, communicable disease cases, and so on, until the student has been gradually introduced to the various types of work usually encountered in the district.

Three times daily the students report at the station, to receive assignments, to plan their work, and to carry out the necessary office detail. An opportunity is afforded at these times for conference with the instructors. In this way the instructor is enabled to keep constant oversight of the students' work, and the students have an opportunity for immediate consultation and advice upon problems arising in the families they visit.

Every morning a conference is held by the Director, which is attended by all the instructors and students. These conferences, in which the students take an active part, constitute an invaluable part of the training. The program may consist of demonstrations of nursing technique, instruction in procedures, consideration of social or other problems in individual families, or discussion of subjects of general professional interest.

Students thus have the benefit of demonstrations given by the instructors in the homes, of direct supervision of their own work in the homes, of in-

dividual conference three times daily with the instructor in the office, and of group discussion in the morning conferences. By this careful teaching they are enabled to derive the full benefit from their experience in field work.

The nursing technic of the students who were observed gave evidence not only of good supervision, but even more important, it showed that the students had a knowledge of the principles of hygiene and sanitation. Sometimes nursing work is done in which the technic is mechanical,—where the nurse observes the details as they were taught her but does not use intelligence in adapting the underlying principles to the special circumstances she encounters.

In the University District, however, the reverse was found. In their scrupulous attention to detail in the home, in the beautiful care given the patients even in the most difficult surroundings, in their careful disposal of soiled linen and dressings, in their regard for the patients' modesty and comfort, the students in the University District showed that their work was not merely a routine, but was based on an application of the underlying principles of public health and of good nursing.

SCHOOL NURSING

For experience in school nursing students are assigned to the Nursing Division of the Board of Education. During the 3 weeks spent in school nursing they are expected not only to observe, but also to assume responsibility under direction for a part of the work.

INDUSTRIAL NURSING

The experience in industrial nursing consists mainly of observation in 3 or 4 factories. Altogether 12 industrial concerns in Cleveland are cooperating with the University District in offering the students opportunities for observation and experience. It has been possible for a number of students to spend a week each in observing the work in the Goodrich Tire Co. in Akron.

CLINICS

Unusually ample facilities for observation and training in clinics are available for the students. All students, except the pupils admitted for 2 months only, attend the following: Clinic for Well Babies, Prenatal Clinic, Tuberculosis Clinic, and the Babies' Dispensary (sick babies).

In the University District Health Center prenatal clinics are held twice a week, and prophylactic baby clinics three times. These clinics are conducted by the instructors and attended by the students, who thereby obtain valuable experience in clinic management. Students usually spend 12 hours in all at the Clinic for Well Babies, and 4 to 6 afternoons at the Prenatal Clinic.

Six hours for 3 weeks are spent by students at the Tuberculosis Clinic of another Health District (Health Center No. 8). The hours of observation are followed by lectures and discussions.

BABIES' DISPENSARY

An important part of the clinic experience is the training at the Babies' Dispensary, where the students spend afternoons for a period of two to three weeks. During this time 16 hours are devoted to lectures and discussion, of which 8 are lectures on sick babies by physicians, and 3 are classes in practical work given by the Superintendent of Nurses. One hour each afternoon is spent in reading the literature of diseases of children. The practical work consists of attending examinations during which the cases are explained by doctors, and of some supervised work in the clinics; of instruction in the Social Service Department; and of work in the Milk Laboratory, where sterilizations are taught.

The excellent standards of infant welfare work established by the Babies' Dispensary are reflected in the child hygiene work in the University District.

The effectiveness of the teaching is shown by the readiness of mothers to cooperate in preventive work, their ability to follow the nurses' directions in milk modification, and their willingness to bring their children to clinics for observation as well as for treatment in illness. It is clear that the work of the Dispensary constitutes a valuable part of the students' practical training.

CONCLUSION

The tests of public health nursing are many and various,—as many, perhaps, as the types of people and of needs that are met. But underlying all differences of race or creed, of age or individuality, is the common question: How does the public health nurse meet her problems? Not merely how well does she nurse this or that patient, or how well did she cheer this or that person, but what total impression does she make on her families, how does she succeed in solving the total family health problem? Has she taught her families anything of hygienic living, has she gotten their confidence, has she observed and taken measures to deal with evidences of illness and failures in habits of health in other members of the family beside her immediate patient?

Judged by such standards, the course in public health nursing has clearly achieved a large measure of success. Various factors already described have cooperated to bring about this result. Special recognition should, however, be given to the devotion of the professional staff, and to the public spirit and appreciation of the modern public health nursing movement which has been shown by the University authorities and the lay committee who are jointly responsible for this notable contribution to nursing education.

In general, then, the Course in Public Health Nursing is admirably organized and highly effective. Its usefulness could be even further increased by an expansion of its staff, better office facilities, and ampler provision for postpartum service, in accord with the following recommendations.

RECOMMENDATIONS

1. A full-time assistant director should be appointed, who should share the teaching and relieve the Director of part of her routine duties.

The Director should thus be enabled to devote more time to developing the work, to increasing facilities, and to extending the training.

2. Another instructor should be appointed.
3. A private office should be secured for the Director, and additional office space for the instructors and students.
4. The number of post-partum cases nursed by each student should be increased as soon as possible.
5. In view of the need throughout the country for trained public health nurses and the exceptional opportunities for training afforded in Cleveland, efforts should be made to secure the greatest possible number of students, and the staff and teaching facilities should be sufficient so that all qualified applicants may be admitted. The greatest possible number of pupil nurses should be enabled to take the four months' training in field work.

INSTITUTE OF SCHOOL HYGIENE

The Institute of School Hygiene, organized by the Cleveland Board of Education with the cooperation of Western Reserve University, gives a six weeks' summer course to graduate nurses who have had practical experience in public health nursing. This Institute includes eminent experts from various parts of the country upon its instructing staff and attracts several hundred students who are enthusiastic about the benefits derived therefrom. The course offered is a real contribution to graduate nursing education, and deserves to be generously supported so that it may be continued and extended in future years.

Public Health Nursing in Cleveland

INTRODUCTORY

IN the development of public health nursing in the United States, Cleveland has played a leading part, various features of which stand out conspicuously for their high degree of excellence, as standards set for the whole country.

Among these successful elements, the most conspicuous are the existence of the Central Nursing Committee for the city, the concentration of activities in a small number of agencies, the development of generalized nursing and the existence of the University Public Health Teaching District.

Underlying all these activities and essential to their success has been the unusual degree of interest and responsibility on the part of the various authorities and boards in charge, both professional and lay members. Without this sustained backing, the different organizations at work could not have achieved the success of which, in spite of various shortcomings and misdirected efforts, the Nursing Survey found proof in its detailed appraisal of the field.

The recent opening of the beautiful Nurses' Club with its exceptional opportunities as a professional and social center, illustrates concretely the appreciation of nursing work in Cleveland and the generous participation of lay workers in the best interests of the profession.

SCOPE OF THE SURVEY

The organizations carrying on public health nursing which were studied by the Nursing Survey were the following: the Division of Health, the Visiting Nurse Association, the University District, the School Nurses, and some Out-Patient Departments of Hospitals. Nursing at the Babies' Dispensary and Industrial Nursing were also studied. Findings and recommendations as to the work of each agency are given later in this report.

Our study covered the details of organization and administration, the personnel and plans of work. In addition our investigators accompanied nurses into the field, in the clinic and health center, the school, factory and home and observed their personal contacts with individuals and families. For by this test obviously such work stands or falls. No matter how well planned and administered in theory, or how lofty the aims and ambitions of organizations, they can ultimately be judged by nothing more or less than by the performance of their agents in the field, by the success of their efforts in preventive as well as curative work.

The statistics of attendance at clinics or health centers, or the number of visits made per nurse or district does not tell the story completely without observation of the quality of service; the success or failure in teaching the elements of hygienic living as well as giving nursing care, or protecting the community from disease.

SOME ELEMENTS OF SUCCESS

Common to all the organizations studied is the unusually fine spirit of the staffs, whose members almost without exception were found conscientious and alert. The existence of the Central Nursing Committee and the concentration of work in a few organizations obviously makes for greater uniformity of method and treatment than when diverse agencies are at work, and lessens the chances of duplication or misunderstanding.

The most notable contribution, however, made by Cleveland in the public health field is the success of the generalized nursing system, demonstrated most completely in the small University District, with its high ratio of nurses to population, by the Visiting Nurse Association less completely in a larger area and by the municipal staff so far as it has been adopted for the city as a whole. No other city of its size or larger has ventured to adopt a generalized municipal system. Few smaller cities have done as much. Cleveland is thus leading the way in one of the most hopeful developments of the modern public health work.

VALUE OF THE GENERALIZED SYSTEM

By generalized nursing is meant in this report the system by which a community is divided into small districts, one nurse being assigned to each district to do all the necessary varieties of nursing and of instruction in habits of health in that district.

In successful generalized nursing, the resources of the separate nursing specialties are pooled. Overlapping of visits for special purposes is eliminated; overhead charges for maintaining separate services are reduced. The generalized nurse, doing either instructive or bedside work, is enabled to cover the ground, to find new cases and grapple with family problems as the specialized nurse in many instances cannot.

The assertion is often made that under the generalized plan, the special needs of public health work, such as child hygiene or the care of tuberculosis, is neglected or less successfully carried on than when the nurse is trained along one such line, and devotes herself exclusively to her one specialty.

This is a controversy of long standing; it is undoubtedly true that demonstrations of the value of one special service such as the work of the Maternity Centre Association in New York, or of many tuberculosis societies, are of great value in setting standards of performance or in developing a more perfect technic than is often possible in the excessively large districts and with the excessive number of patients carried by many general visiting nurse associations. Yet where generalized nursing has had the fairest trial in Cleveland, that is in the University Public Health District, where the number of nurses to population and the supervision of the work is most adequate, no branch of nursing appears to have suffered from being merged into the general service, but has on the contrary gained. Where the nursing has been partly generalized, that is under the overburdened nursing service of the Division of Health, the bedside care of the sick has, as we shall see, been neglected; under the Visiting Nurse Association, the instruction of the family in hygienic habits has not received sufficient emphasis.

Obviously, for the success of generalized nursing, highly skilled supervision is a prime requisite. Direction by specialists must keep the balance between the various needs of the different nursing specialties. In our recommendations for the organizations studied special emphasis has therefore been laid on methods of administration and supervision.

SOME CAUSES OF FAILURE

Inadequate Numbers of Nurses

Where failures were found in the work they were due, in Cleveland as elsewhere, to two main causes: insufficient number of nurses and inadequate or faulty supervision. The volume of work undertaken is far too great for the size of the different staffs, and too great for their combined numbers.

According to the best opinion for a generalized service the ratio of nurses to population should be about in proportion of one to 2,000. In Cleveland, counting all but industrial nurses, the proportion is about one to 5,228 population.

The distribution of nurses is as follows:

Division of Health (66 at work at time of investigation).....	80
Visiting Nurse Association.....	32
Board of Education.....	31
University District.....	10
	—
Total.....	153

Population, 796,836.

Ratio, approximately 1 to 5,228.

To reach the recommended figure of 1 to 2,000 population the total number should be 400 nurses. To reach even the ratio of 1 to 3,000 population, the total number should be 266, an increase of 113 nurses over the present figures.

With the present shortage, it is manifestly impossible to do justice to all phases of the work.

The second main cause of failure which disclosed itself in various of the organizations studied is the lack of adequate or correctly conceived supervision. Indeed, supervision of the right order proves itself to be the crux of public health nursing. It is essential not only for planning the work of the staff and coordinating their activities but as a stimulus and guide for the individual nurse in her function of teaching the principles of health as well as giving bedside care.

Supervision of the right order means the actual accompaniment of nurses in their home visiting. It brings to their help, especially in the non-acute cases, where little change is seen from visit to visit, a fresh point of view, greater experience, an ability to see new angles of old cases.

Again and again, as the following reports show, the presence or lack of intensive supervision in the different organizations studied discloses itself in the quality of the work.

It is for lack of stimulating direction that the work of the school nurses tends to become routine; that the nursing service of the Division of Health tends to become an extension of a clinical service, centered on the clinics, rather than a true public health nursing function, going out into the homes.

The Central Committee on Public Health Nursing

ONE of the most valuable assets for public health nursing in Cleveland is the existence of the Central Committee on Public Health Nursing. This committee is probably unique among agencies for the directing of public health nursing, in its composition, and in its influence in matters of public health. It is not too much to say that the high rank of Cleveland as a center for various branches of public health nursing is due in large part to the existence of this committee and the interest in public health nursing which it reflects. To the work of the committee is to be ascribed the unusually high standards of the nurses in the municipal nursing services as well as in the private organizations.

ORGANIZATION

Several years ago this Central Committee was created, representing each of the organizations doing public health nursing in the city, composed of two representatives from each, one of whom was the superintendent of nurses and one a trustee, board member, or executive officer, "for the maintenance of uniform standards of training and of public health nursing throughout the city."

The following organizations were included:

Division of Health of the City Department of Welfare,

Board of Education,

Babies' Dispensary and Hospital,

Visiting Nurse Association,

Anti-Tuberculosis League,

Western Reserve University Teaching District.

Each organization selected its own representatives and the whole group chose a chairman and vice-chairman who might not be from among its members, but were added to the committee, and engaged a secretary on part time.

The committee does not meet at regular times, but whenever there is a problem to be studied and acted upon, perhaps not oftener than four or five times a year at present. Its decisions are not binding, but are presented in the form of recommendations to the organizations represented, and have almost invariably been voluntarily approved and acted upon.

ACTIVITIES

The matters that have been considered by the Central Committee, and standards determined are:

1. The receiving of all nurse applicants and securing credentials.
2. The passing on all credentials, accepting or rejecting the applicant.
3. The assignment of applicants to the various public health nursing organizations, and exchange of applicants from one organization to another.
4. Discussion and recommendation of uniforms.
5. Recommending salary schedules.
6. Study of bags and equipment.

The chairman of the Central Committee (always a layman) and the superintendents of nurses form an eligibility sub-committee which performs duties under numbers 2 and 3. All professional standards are determined by this sub-committee. The assignment of applicants to the various staffs is determined by this sub-committee on the basis of first, expressed preference of applicant; second, urgency or emergency need; third, the date on which a request for additional nurses was filed by the superintendent. There has been no dissension among the superintendents over the assignments. Nurses are told of the work of all agencies and allowed to express preference they have any. They are assigned to the agency of their choice if there is a vacancy.

RECOMMENDATIONS

The Central Committee has already performed a notable service in harmonizing the problems of personnel, professional standards and salary schedules, and it is thoroughly representative in its composition. But additional factors must be continuously considered for the effective growth of public health nursing in any city:

Coordination of the activities of the various public health nursing agencies.

A well balanced development of different types of work in accordance with a coherent program for the city.

Continuous study of the expanding needs of the city, and of new developments in public health nursing.

Maintenance of uniformly high standards.

The Central Committee appears to be the body logically to be charged with the responsibility for the additional factors enumerated. Therefore, it is recommended that the Central Committee assume the following functions in addition to those it already has, its decisions, however, as heretofore, not to be binding upon the organization represented.

New Functions

- 1. Coordinating all nursing agencies of the city and obtaining agreement among them as to the functions to be performed.
- 2. Review of all plans for new projects or for modification of current programs of participating agencies, based on data from the Welfare Federation.
- 3. Creation of several sub-committees for research and consideration of special professional problems. Some of these might be for the present:

Prenatal and maternity service,
Industrial nursing,
Generalized nursing.
- 4. A campaign to recruit students for training schools and graduate nurses for public health nursing.
- 5. Adding to personnel representatives from the Chamber of Commerce and industrial nurses, and placing them with others on a sub-committee on industrial nursing.
- 6. Adding to personnel representatives from the proposed Obstetrical Council and placing them with others on the sub-committee on prenatal and maternity service.
- 7. Appointment of a sub-committee to advise with the Division of Health, and with its permission to supervise the proposed extension district.

Division of Health Nursing Service
Scope of the Work

THE nursing service of the Division of Health covers a wide range of activities including nearly every form of public health nursing coming within the range of any municipal health department's functions and many more than are usually undertaken by municipalities. Starting with the prevention of communicable diseases in 1909, the service has been extended year by year until it now includes eight branches of public health nursing, as follows:

	Undertaken in
Prevention of communicable diseases.....	1909
Tuberculosis work.....	1910
Infant Hygiene.....	1911
Prevention of Blindness.....	1912
Regulation of Midwifery.....	1912
Supervision of Boarding Homes for Babies.....	1913
School Nursing in the Parochial Schools.....	1917
Prenatal Nursing.....	1918

These services were maintained as separate units, each with its own staff nurses, until early in 1917 when the separate staffs were combined into one, the field divided into smaller districts, and each nurse assigned a district and made responsible for all kinds of work within that district. Cleveland is to be congratulated on its advanced stand in thus adopting a generalized municipal nursing system.

The Present Staff

The present staff (March, 1920) consists of an assistant director, three special supervisors, seven field supervisors and seven assistant field supervisors, in addition to a field staff of 66 nurses. There are two stenographers each of the seven Health Centers and the Nursing Service shares the use of several at the main office in the City Hall.

Analysis of Activities

COMMUNICABLE DISEASES

In seven districts sanitary officers place and remove placards on houses in which there is a contagious disease. In these seven districts the nurses visit patients having scarlet fever and diphtheria.

In the remaining district (District number 1) the nurses do the placing and removing of placards and visit patients having contagious diseases which are placarded as follows:

Cerebro spinal meningitis,

Infantile paralysis

Diphtheria,

Scarlet fever,

Whooping cough,

Measles,

Chickenpox,

Typhus fever,

Cholera,

Plague,

Leprosy.

} Diseases rarely occurring in Cleveland.

In none of the districts do the nurses visit smallpox patients or families from which a smallpox case has been removed.

The nurse's duties include explanation of the sanitary code; the establishment of isolation of the patient and instruction of the family concerning the maintenance of isolation; the establishment of quarantine. The nurse also determines what persons are to have permits to leave the house and she issues the permits; she takes release cultures unless the doctor on the case prefers to do so himself; arranges for hospital care for the patient and the giving of nursing care.

Conversation with the nurses and supervisors and study of the records leads to the strong impression that attention is largely focussed on the issuing of permits and the time-consuming taking of cultures, rather than on the care of the patient, the instruction of the family in caring for him, or on measures for their own protection. "Nursing care is rarely given," is the unanimous opinion of both nurses and supervisors because in their estimation, "it isn't needed."

Typhoid patients have been visited only since the fall of 1919 and then only for the purpose of filling out a questionnaire in the attempt to trace the source of infection. No attempt is made to care for the patient, to teach the members of the family how to care for him, nor how to protect themselves. Neither is any effort made to see that the patient has such care; only 5 cases out of 165 came to the attention of the Visiting Nurse Association last year.

Pneumonia cases are not visited or reported to the Visiting Nurse Association to be visited.

Outside of Districts I. and VIII., no attention is paid to measles or whooping cough. While from the point of view of checking the spread of a contagious disease it may be futile to do more than to placard these diseases, from the point of view of the future health of the patients, instruction in nursing care and supervision are badly needed to prevent the frequent, serious and often fatal sequelae. Such oversight and care could be given by the staff of the Visiting Nurse Association.

TUBERCULOSIS

Scope:

The tuberculosis work includes the maintenance of 35 tuberculosis clinics a week, and the follow-up work in the home. Every patient who comes to a clinic is visited in his home and if his case is positive or cannot be satisfactorily diagnosed he is "carried on the books" and visited occasionally, if the doctors are willing. All cases reported as positive by doctors and all patients whose sputum has been sent in for analysis are visited. Likewise, all patients referred to the Hospital Admission Bureau to be sent to the City Hospital, the State Hospital or Warrensville, and all suspicious or positive cases referred by other nursing or social agencies are visited.

Plan:

Unless they attend the clinic regularly, an effort is made to visit all these patients once a month to give detailed instruction in treatment of the patient and prophylaxis. Nursing care is supposed to be given to all those in need of it who are unable to pay seventy-five cents a visit. Those able to pay this amount are supposed to be referred to the Visiting Nurse Association, but only 51 cases were cared for by the Visiting Nurse Association between October, 1918, and October, 1919. The statement is made that there is little need of nursing care. It is intended to have the whole family and other persons who have been exposed, especially the children, examined at the Health Center or by a private doctor. If a very suspicious or posi-

tive case fails to return to the clinic, a form letter is sent. If there is no response a second is sent containing a threat to send an officer after the patient. This is often efficacious, but if it brings no response, the officer is sent. Apparently this method is used with some frequency.

Performance:

While diagnosis and instruction at the clinic and the effort to secure clinic attendance are emphasized, study of the home conditions, the arrangement for prophylactic mode of living at home, careful instruction and nursing care are inadequate and home visits are far too infrequent. Nursing care is rarely given. The nurses do not have time to hunt up incipient or advanced unreported or undiagnosed cases.

The records show that there is an average of about 100 tuberculous patients to each nurse. The reports show that in one month the average number of visits made by the nurses to patients tuberculous, suspicious and non-positive was .47 per patient.

In a second month it was .64 per patient. The supervisors stated that it was not possible to visit even the positive cases once a month, and the suspicious and contact patients were visited at intervals varying from two to six months. The records verify these statements. It is, therefore, evident that the patients are not seen frequently enough for effective curative or preventive work, and that little attention can be given to securing examination of the family and others exposed. There is no easily applied check in the records to show the frequency of clinic attendance and home visits. Nor is there any study of the sources from which the cases come to reveal areas of the city which should be brought under surveillance.

In accompanying nurses in their districts much time was lost in attempting to locate some tuberculous patients who had moved away a month before. If the nurses were able to call on their patients more frequently it would be easier to keep in touch with them when they moved.

CHILD HYGIENE

Scope:

This service included the maintenance of well baby clinics at 13 prophylactic stations; follow-up visiting of these babies in the homes; visiting all babies attending the Babies' Dispensary and Hospital; visiting all babies whose births are reported, and visiting babies discovered in the course of routine work in the districts or reported by doctors and neighbors.

Performance:

From the records it appears that each nurse has under supervision an average of about 200 babies. Study of the records shows that an average of .4 visits is paid each baby each month; that is, each baby is visited about once in every 2 to 2½ months. One in every 9 babies comes to the clinic once during the month.

Attention is largely concentrated on feeding of babies; instruction in infant hygiene both at the clinic and in the home is somewhat neglected. Home visits are too infrequent and irregular. From the records it appears that nursing care is rarely given and then very inadequately. These conditions are due to the fact that the nurses have too large a number of patients per nurse to care for.

Yet individual instances of good home visiting were found. Thus, in accompanying one nurse in a visit to the mother of twin babies, the investigator was impressed with the nurse's sympathy and good teaching. With three older children and a husband to take care of, the mother, herself half sick, had prepared the babies' milk modification excellently, and showed the results of thorough instruction. She brightened at the nurse's entrance.

PREVENTION OF BLINDNESS

Baby eye work was done by the Babies' Dispensary and Hospital until January, 1917. At that time it was turned over to the Division of Health. It was done at first by a special group of nurses until August, 1919, and was then put into the general service.

Nurses are sent to care for ophthalmia neonatorum cases the same day they are reported, and they try to return as often as necessary. Where the case is acute and home care inadequate it is sent with its mother to the hospital.

There are no figures to show the number of such cases or the care given. The opinion of the director of the staff is that it is well done.

Trachoma is a reportable disease and all cases reported by doctors or by the Board of Education are visited by the nurses.

MIDWIFE SUPERVISION

This work is entirely under the control of a special supervisor. There are 160 licensed midwives and 110 practising without licenses. The licensed midwives are visited in their homes at irregular intervals for the purpose of giving them instruction in prenatal and infant hygiene, technic, and examination of their bags and stubs. Some are visited frequently; some not oftener than once a year. They are not supervised during delivery, nor do they receive demonstrations. There is little time or opportunity for the discovery of illegal practitioners. Much more frequent visits are necessary.

(For further discussion of the midwife situation see report on child health work, Part III.)

SUPERVISION OF BOARDING HOMES

The nurses are supposed to visit each home in which babies are boarded out under license from the State Board of Charities and to send a report to the Humane Society. There are no records to show the frequency of these visits or the thoroughness of the work done. All these babies get special milk free from the Health Center, and the matron is expected though not compelled to bring the babies to the Health Center regularly.

A visit to a boarding home with one of the nurses in the course of our investigation, gave evidence of good home teaching. The baby was anaemic, with an acute vaginitis, had broken places on lips and irritation of mucous membrane in mouth, the latter indicating a probable digestive disturbance. Instructions in regard to vaginal care evidently had been very good, for the trouble was clearing up rapidly.

PAROCHIAL SCHOOL NURSING

In March, 1917, the Division of Health Nurses undertook some work in 17 Parochial Schools, increasing to 21 schools for the school year 1918-1919. 9323 pupils in these schools received one physical inspection (by a nurse alone). In addition to sending a note to the parents, an effort was made to follow up all children found to have defects. No tabulation has been made to show what percentage of defects the nurses succeeded in having corrected. Incomplete as this service was, it consumed a good deal of time and effort, and no doubt certain appreciable results were obtained.

For the school year 1919-1920 all the remaining parochial schools were added to the list making a total of 68 with a school population of approximately 35,000. To have carried on the work at all for so many schools would have consumed the full time of at least twelve nurses and twice that number would be needed to get real results. As the entire field staff of the Nursing Service averaged only about 50, it was obviously impossible to devote the necessary time to school nursing in addition to the many other heavy duties. No attempt was made, consequently, to carry out the program of the previous year. A single observation was made of each school room full of pupils to discover any evidences of contagious disease. A visit was undertaken once a week to each school to get a list of absentees and to give the sisters an opportunity to consult the nurse about any special cases. The nurses undertook to visit as many as possible of the children who were seldom absent or whose absence was not explained.

Such work cannot be called school nursing. Until the staff can be increased to devote the equivalent of the full time of twelve nurses to this service, it would seem better to concentrate all the work in a few schools (those in one district) where it can be done intensively and adequately.

PRENATAL NURSING

The extension of advice and supervision to all prenatal patients except those under care of a private physician was undertaken in 1918. Those unable to have a private doctor were carried until visited by the out-patient nurse from St. Luke's or from the Cleveland Maternity Hospital. No definite routine has been established and no attempt is made to do urinalysis or take blood pressure.

Little effort has been made to work up this service, the nurses frankly admitting that they have too much to do to undertake this additional burden. Less than one visit per month is paid each prenatal patient. Thorough work (according to the standard of the New York Maternity Center)

is not undertaken. Again until the staff can be augmented in sufficient numbers to make thorough work possible, it would seem advisable to discontinue this service except for one district and in that district to make it a part of the city-wide service elsewhere described.

Analysis of Administration

ORGANIZATION

The chart of organization of the Division of Health places the Nursing directly under the Commissioner's office, serving all bureaus as needed and directly under his control. For budget purposes the nurses are distributed among the bureaus of Child Hygiene, Communicable Disease, and Tuberculosis. As a matter of fact there is a single staff of nurses doing generalized work under one director, who is responsible to the Commissioner.

HEADQUARTERS STAFF

At present the staff at Headquarters consists of: Director of Nurses, Assistant Director and three Special Supervisors, one having supervision of parochial schools, one of eye work and midwifery. The third is responsible for various duties, compiling the monthly statistical reports, such as bi-weekly Health Center staff meetings, visiting nurses who are sick, and performing several other odd duties.

The work is so arranged at headquarters that none of the staff are charged with responsibility for analyzing the character and results of the work, for studying the needs and personalities of the staff and developing them, for promoting true leadership in supervision and for extracting the maximum value of generalized work through building up family health work. The headquarters staff instead are engaged in more or less routine duties which give them no time or opportunity for these broader, fundamental duties.

The absence of a special office for the director tends to immerse her constantly in unimportant details that should be carried by others.

STAFF AT HEALTH CENTERS

Spirit of Staff

The present staff at each Health Center consists of a nurse supervisor and an assistant supervisor and from 6 to 12 field nurses.

Each center has a fine spirit of team work and loyalty. The helpful, generous cooperation of nurses and supervisors calls for commendation. The cooperation between the Health Centers and other social agencies is close and productive of good results. In discussing their cases, the nurses have their information well in hand, and are not easily confused.

The spirit of the work cannot be criticized; on the contrary, the spirit of service that dominates the work is admirable. All of the supervisors and nurses who were seen are evidently working very hard and against the odds of having too much to do, and of trying to do it without carefully organized plans.

Records

In spite of the fact that in every Center but one, the supervisor, her assistant, and two full-time stenographers spend practically all their time in clerical and administrative work, the nurses find it necessary to spend an average of two hours daily, out of their seven-hour day, in work in the Center. Observation might possibly show the time so spent to be even greater, especially in the Centers where the nurses return at noon or at four o'clock for new calls. There is only one Center of which this statement does not hold true. Much of this time is taken up in clerical work. A simplified and coordinated system of records would eliminate a large amount of this routine work.

The compilation of the monthly statistical reports is a very difficult task because of the cumbersome and confused method of reporting. The record system, having been developed piecemeal and service by service, is far from coherent. Many figures are gathered which serve no useful purpose, and figures necessary for a proper appraisal of the work and an accurate measurement of results are not obtainable. An altogether unjustifiable amount of the nurses' time, both at the City Hall and in the Health Centers, is consumed in keeping up this complex and voluminous system of bookkeeping. Reorganization is needed, but it is doubtful whether anyone in the Division of Health is qualified to evolve a properly simplified method of record keeping. An expert should be engaged to reorganize the system, both in the City Hall and the Health Center, and thus save valuable time now being wasted in unnecessary clerical work. The proper person to provide forms, to organize records and to analyze the tabulated information received through the nurses' reports, would be the statistician of the Division of Health, as proposed in the chapter on Vital Statistics.

After such a system had been installed it should, so far as possible, be turned over to an office manager. It is highly desirable that such an office manager be appointed in the office at the City Hall and one at each Health Center, to whom the greater part of the detail work could be shifted in order that the supervisors may have an opportunity to attend to their more important duties of direction.

The laborious work now spent in keeping the milk book—to mention only one instance—could be turned over at once to the office manager.

THE STAFF OF FIELD NURSES

Abundant evidence is available to show that the nurses are heavily overloaded with work and are carrying far too many patients per nurse, and covering too large a territory to do effective work. They average 260 families each. The number is considerably higher when estimated by individuals. They are overburdened with the intricacies of the complicated record system and the large amount of time spent in the clinics leaves insufficient time to develop home visiting. As a result, the nurses are often discouraged. The average number of home visits is over 300 per nurse per month. The patients scarcely receive an average of one visit per month.

The nurses are doing their best under this accumulation of overwork, but cannot be expected to obtain substantial results when they are able to give so little attention to constructive teaching to patients in their homes.

NEW NURSES

New nurses do not receive proper introduction to their work. They are sent out with another nurse for a day or two and receive only such instruction as a very busy Supervisor can find time for in the Health Center. No other instruction is given. The character of the nurse's work is not studied, her weaknesses found and methods of correction pointed out, nor is there any way of developing the abilities of a nurse. No efficiency records are kept. Such a record should not only analyze the nurse's ability and work, but it also should demonstrate the supervisor's ability to know the nurses, to fit them into districts, to develop strong points and to direct enthusiasm and energy into proper channels. The record of the nurse should be discussed by the Center supervisor and the director of nurses, and the nurse put into the district she can best serve. At present the supervisors have no regular method of trying to fit the nurse to the district. If it is apparent that she is not getting cooperation, she is transferred, but this happens infrequently.

UNIFORMS

The nurses wear any kind of street clothes they choose. They go in and out of district homes giving nursing care in suits and woolen dresses. This is not only exceedingly bad practice but detracts from the usefulness of the nurse, since she is not readily recognizable as a nurse while at work in the district, and her costume is not suitable for giving nursing care.

Probably one reason that so little actual nursing occurs is the fact that the nurses do not wear uniforms. Even though they are protected by a gown, they are over cautious in approaching the bedside of a contagious or infectious case. If effective work is to be done in home visiting, teaching by actual example must take place, and this cannot in wisdom occur unless the nurse is in a washable uniform. Moreover, the smart uniform adds to the dignity and impressiveness of the nurse.

GENERAL CONCLUSIONS

The principles and plans of the Nursing Service of the Division of Health are, in general, excellent. Its performance, however, does not equal its ideals, mainly because it has not increased its staff sufficiently to carry the ever increasing volume of work. The majority of its shortcomings can be laid at the door of the insufficiency of numbers. The rest are due to a top-heavy plan of management and insufficient supervision.

At present emphasis centers around attendance at Health Centers, diagnosis and prescription for treatment. The nursing service is in reality an extension of a clinical service rather than a true public health nursing service. Home visiting is an adjunct rather than the prime activity of the nurse. *What is needed* is greater frequency of visits in the home, and also longer

its so as to enable the nurses to pay more careful attention to the health of the family, to the teaching of hygienic habits, and the giving of nursing care.

A PROPOSED EXTENSION DISTRICT

In order to afford an opportunity for the city to extend its nursing service further in the direction of a generalized system, without at present imposing further duties upon the staff as a whole, it is desirable that such extensions be undertaken in one district only, which might be designated the Extension District. One of the present Health Center Districts might be devoted to this purpose.

In this district two experiments making for a completely generalized service might be tried. In addition to the present activities of the nursing staff, the following services might be undertaken:

1. Prenatal nursing as a part of the city-wide plan.
2. School nursing in the parochial schools.

If these experiments prove successful there might later be added:

1. General medical and surgical nursing service.
2. Obstetrical and post-partum nursing.

In order to provide every opportunity to make such an extension district successful, it should have the following favorable factors:

1. A district of approximately 50,000 people.
2. The direction of a well trained public health nurse who has had experience with generalized work, including visiting nursing.
3. A supervisory staff of four supervisors.
4. A nursing staff of 18 nurses (1 to 3,000 population).

A sub-committee on generalized nursing of the Central Committee might be requested by the Health Commissioner to act as an advisory committee for the Extension District and expected to exercise close oversight of its conduct and results.

RECOMMENDATIONS

It is therefore recommended as follows:

ACTIVITIES

Communicable Disease Prevention:

That more attention be given to protection of members of the family other than the patient, to arranging for adequate nursing of the patient, and to instruction regarding prevention of sequelae.

That pneumonia, measles, whooping cough and typhoid cases be reported to the Visiting Nurse Association, which will seek permission of the private doctor to give nursing.

2. Tuberculosis Work:

That this service be continued and greatly increased, especially in the field of home visiting for instruction and nursing purposes, and in an effort to discover new cases. All tuberculosis patients should be visited at least once a month and those in need of care much more frequently. Much more effort must be given to having the family and those exposed examined.

3. Child Hygiene:

That this service be continued and amplified. Much more home visiting is imperative for careful instruction in infant and child care and for nursing care. That a standard routine be adopted and mechanical methods devised to check it up. All babies should be visited at least once a month and sick babies daily.

4. Supervision of Midwives:

That this work be increased; visits be made more frequently; time be provided for hunting illegal practitioners, for demonstration and for inspection of technique and delivery.

5. Prevention of Blindness:

That the present routine be continued, but it should be made certain that the care given is adequate in frequency and quality.

6. Supervision of Boarding Homes for Babies:

That a definite routine of visits and procedures be established, extending to these babies constant oversight in all matters of health and general care, as well as feeding.

7. Parochial School Nursing:

That the present entirely inadequate and nearly futile effort of providing service for all parochial schools be discontinued. That all parochial school nursing be concentrated in the proposed Extension District, where an intensive piece of work may be done.

8. Prenatal Nursing:

That this service be restricted to the proposed Extension District, as a part of the city-wide maternity system.

9. Extension District:

That one of the present Health Center districts be set apart as an Extension District for the purpose of initiating new projects or methods before undertaking them on a city-wide basis, in accordance with the detailed suggestions made above.

ADMINISTRATION

1. Organization:

(a) That all nursing service now carried on or to be carried on by the Division of Health be under the direction of a Director of Nurses, who should be immediately responsible to the Commissioner of Health.

(b) That the nursing service for the Bureaus, whose work requires the services of nursing (such as the Bureau of Communicable Disease, the Bureau of Child Hygiene, the Bureau of Tuberculosis) be performed by the general staff of nurses, and that the working relations shall be maintained through consultation by the Director of Nursing, the Directors of the three mentioned bureaus, all policies and decisions being subject to the approval of the Commissioner of Health.

Headquarters Staff:

- (a) That the positions of Director and Assistant Director be continued as at present.
- (b) That the present plan of special supervision be discontinued and reorganized as follows:

That four assistant supervisors be appointed, each to have charge of the general oversight of certain activities, as follows:

1. Baby and child hygiene.
2. Communicable disease.
3. Tuberculosis.
4. Midwifery, boarding homes, eye work.

The fourth assistant supervisor to have an assistant.

(c) That these supervisors should have two functions, acting as special consultants in their own field, and as instructors in their special services. These supervisors should work out and conduct a scheme of continuous education for the staff. They should be responsible for the instruction of new nurses in the routine policies and procedures of the work and in the special technique and practices of each special service. They should also be responsible for classes, consultations and conferences for the whole staff.

In their capacity as special consultants they should be responsible for the study and analysis of the nursing work accomplished, both as to quality and quantity, and the development of this work in their own special services. They should make studies in co-operation with the directors of the various bureaus of the Division of Health, and should act as liaison officers between these bureaus and the nursing service. They should act as connecting link between the Nursing Service and the special outside institutions related to their work.

(d) That there should be an office manager responsible for all the business details of the office, and for all the records. This position should be sufficiently well paid to make possible the employment of a thoroughly competent woman.

(e) That the Director of Nursing should have a private office.

Records:

That the record system be simplified; that a record expert or the statistician of the Division of Health be employed to set up a simple, practical and effective record system and that the statistical work be done by the office of the statistician of the Division of Health rather than by the nurses.

The record system for the Health Centers and Headquarters should be uniform, and the office manager should be held responsible for it. In order to secure continuity and

2. Tuberculosis Work:

That this service be continued and greatly increased, especially in the field of home visiting for instruction and nursing purposes, and in an effort to discover new cases. All tuberculosis patients should be visited at least once a month and those in need of care much more frequently. Much more effort must be given to having the family and those exposed examined.

3. Child Hygiene:

That this service be continued and amplified. Much more home visiting is imperative for careful instruction in infant and child care and for nursing care. That a standard routine be adopted and mechanical methods devised to check it up. All babies should be visited at least once a month and sick babies daily.

4. Supervision of Midwives:

That this work be increased; visits be made more frequently; time be provided for hunting illegal practitioners, for demonstration and for inspection of technique and delivery.

5. Prevention of Blindness:

That the present routine be continued, but it should be made certain that the care given is adequate in frequency and quality.

6. Supervision of Boarding Homes for Babies:

That a definite routine of visits and procedures be established, extending to these babies constant oversight in all matters of health and general care, as well as feeding.

7. Parochial School Nursing:

That the present entirely inadequate and nearly futile effort of providing service for all parochial schools be discontinued. That all parochial school nursing be concentrated in the proposed Extension District, where an intensive piece of work may be done.

8. Prenatal Nursing:

That this service be restricted to the proposed Extension District, as a part of the city-wide maternity system.

9. Extension District:

That one of the present Health Center districts be set apart as an Extension District for the purpose of initiating new projects or methods before undertaking them on a city wide basis, in accordance with the detailed suggestions made above.

ADMINISTRATION

1. Organization:

(a) That all nursing service now carried on or to be carried on by the Division of Health be under the direction of a Director of Nurses, who should be immediately responsible to the Commissioner of Health.

(f) That new nurses be taken out by the field supervisor for at least two or three days before they are allowed to go alone, and that they be then visited at frequent intervals by the field supervisor (once a week for a month) while at work in their district.

(g) That new nurses attend weekly classes at the City Hall, to be conducted by the special supervisors, to be trained in the technique and methods of work in the special fields.

(h) That the weekly conference now being held for the whole staff at the City Hall continued, and be included in the scheme of education worked out by the special supervisors.

Salaries:

That the salaries of the staff nurses, the field supervisors and the special supervisors, be increased to meet the schedule recently recommended by the Central Nursing Committee.

Uniform:

That a wash uniform be adopted and worn by all members of the staff (except the Headquarters Staff, if so desired).

The Visiting Nurse Association of Cleveland

Scope of the Work

THE Visiting Nurse Association of Cleveland undertakes to extend home nursing care, except in communicable disease, to anyone in the city not cared for by any other public health nursing agency. This service is given free to those unable to pay for it; part pay is charged to those unable to pay the regular fee; all others pay the full fee. The pay service is not restricted, but may be used by anyone except that it cannot be obtained at a regular fixed hour, nor extending over one-half day, nor for cases in which only attendance is wanted and no nursing care for illness is needed. Visiting nursing is also provided for policy holders of the Metropolitan Life Insurance Company, for which the company pays the Association at the rate of sixty cents (60 cents*) per visit.

Nursing care in tuberculosis is given only to those patients able to pay 5 cents or more per visit; care is given in diseases of babies under three years, attended by private doctors, but not to babies attending the clinics of the Division of Health; and care is not given in illness among industrial workers who are provided with home nursing service by their employers.

With these exceptions the Association undertakes to care for patients of all ages and patients with all types of disease, acute and chronic, medical, surgical and obstetrical, including also the making and teaching of milk modifications for infants under the care of private doctors.

Like all visiting nurse associations of equal grade, the Cleveland Association has placed chief emphasis upon the primary need of caring for the poor

* Charge has now been changed to \$1.00 as recommended by the Survey.

high grade service there should be assurance of promotion and increase in salary for all the clerical staff, based on merit.

4. Health Centers:

(a) That there should be a district supervisor, who should be responsible for the administration of the Health Center, but whose principal duty should be the supervision of the staff nurses and their work in the homes. Fully two-thirds of her time should be given to field supervision. She should not be subordinate to but chief over the clinic nurse and the office manager, suggested below.

(b) That there should be a clinic or dispensary nurse whose full time should be devoted to the Health Center, for the purpose of running the clinics and talking with patients who come out of clinic hours. She should have no responsibility for home case work or for field work.

(c) That there should be an office manager (not a nurse but a competent business woman), who should have charge of the business management of the center and of all the mechanical and record work, and receiving calls and relaying such of them as are emergent, to the nurses in the field. There should be a uniform system for office management and record work in all the centers. Salaries should be paid in these positions high enough to insure a thoroughly reliable, intelligent and businesslike personnel.

(d) That the practice of having two or three nurses in attendance at clinics be discontinued; that the clinics be conducted by the dispensary nurse with the possible assistance of one staff nurse; that if more assistance is required, it be provided by a clerical worker and not by a nurse.

(e) That a routine of field supervision be established, and that the field supervisors render to the Director a weekly record of their work.

(f) That a separate room be provided in the Health Centers for the field supervisor and her field nurses.

(g) That districts be greatly reduced in size, possibly cut in half.

5. Field Staff:

(a) That the staff should be increased until no nurse carries more than 125 patients, preferably 100. This will mean largely increasing the present staff.

(b) That the staff nurses consult with the field supervisor daily concerning their case work and that she in turn take up any special case problems with the special supervisor at Headquarters.

(c) That an efficiency report be prepared by the field supervisors monthly for each nurse, to be submitted to the Director and kept on file.

(d) That each staff nurse prepare a monthly statistical report of her work.

(e) That new nurses spend the first two or three days of their service in the main office to receive instructions from the special supervisors in the routine, the records and the general practices of the work.

(f) That new nurses be taken out by the field supervisor for at least two or three days before they are allowed to go alone, and that they be then visited at frequent intervals by the field supervisor (once a week for a month) while at work in their district.

(g) That new nurses attend weekly classes at the City Hall, to be conducted by the special supervisors, to be trained in the technique and methods of work in the special fields.

(h) That the weekly conference now being held for the whole staff at the City Hall be continued, and be included in the scheme of education worked out by the special supervisors.

Salaries:

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Nursing care in tuberculosis is given only to those patients able to pay 75 cents or more per visit; care is given in diseases of babies under three years, attended by private doctors, but not to babies attending the clinics of the Division of Health; and care is not given in illness among industrial workers who are provided with home nursing service by their employers.

With these exceptions the Association undertakes to care for patients of all ages and patients with all types of disease, acute and chronic, medical, surgical and obstetrical, including also the making and teaching of milk modifications for infants under the care of private doctors.

Like all visiting nurse associations of equal grade, the Cleveland Association has placed chief emphasis upon the primary need of caring for the poor

* Charge has now been changed to \$1.00 as recommended by the Survey.

who cannot pay for nursing service. Second, is felt the need of caring for persons of small means who may be able to pay a very small fee.

For persons of moderate income a pay service at cost has been recently introduced and should be widely extended. The extension of pay service is not alien to the policies and purposes of any well organized visiting nurse association, but is a natural and logical development of its work. Such a well organized hourly service, at a moderate price, under centralized management is not unlikely in the future to solve the problem of the decreasing number and increasing cost of private duty nurses.

One of the striking developments in paid service, which the Cleveland Association, like a few other leading nursing organizations, has recently taken up, is a paid day and night service during delivery. This work fills a need than which none is more important, but with which for lack of the necessary personnel and funds, visiting nurse associations have in the past not attempted to grapple.

The value of teaching family hygiene and giving attention to the health and hygienic habits of the whole family is recognized by the Association, but is not sufficiently emphasized as a definite function of the nurse.

THE PRESENT EQUIPMENT

In order to perform this work a staff is maintained consisting of a superintendent of nurses, an assistant superintendent, three supervisors, and at present 21 regular staff nurses and six substitutes, and a clerical staff consisting of one office secretary and one clerk at central office and one stenographer at each sub-station. There are a central office and three district offices, all of which are ample in size and equipment for their functions.

Analysis of Activities

Study of the work performed by the Visiting Nurse Association proves it to be of highest grade so far as it goes, but that it does not go far enough. The spirit manifested by the whole organization is lofty, and the work is thorough, painstaking and kindly.

This Association has been of great value in demonstrating many activities to the municipality, such as the care of tuberculosis, industrial nursing, and, together with the Babies' Dispensary, work for babies both sick and well, etc. By turning over these successive activities to municipal and private agencies, the present scope of the work appears to be narrowing and to lack extension into the new fields of services waiting to be developed.

The Board of Trustees of the Visiting Nurse Association has never lacked vision for new opportunities of service. It will doubtless continue its policy of extending into new fields as occasion offers.

CARE OF THE SICK

The care of medical and surgical patients occupies the greatest part of the nurses' time. Approximately four-fifths of the patients are medical or

gical cases, only a very small percentage (less than 1%) of whom are convalescents. The kinds of illness cared for are many, but include very few cases of tuberculosis or other communicable diseases or intestinal diseases of infancy. Between October, 1918, and October, 1919, 51 tuberculosis patients and 16 intestinal cases among babies were treated. Yet the records of the Division of Health show that the second highest cause of death in the city of Cleveland in 1917 was tuberculosis, and the third, diarrhoea and enteritis among children under two years of age.

While it is true that the Division of Health provides for the care of all contagious diseases and for tuberculosis patients not able to pay 75 cents a week, and of sick babies whose parents are unable to pay 75 cents, it nevertheless is surprising that so few tuberculous patients over the 75 cent limit are found in need of nursing care, and so few sick babies outside the scope of the municipal staff. While the city record shows only 165 cases of typhoid during the year, a negligible number of these, only five, are on the visiting nurse list.

Moreover, few post-operative cases discharged from hospitals before complete recovery are under visiting nurse care. Many hospitals dismiss surgical patients as soon as they have recovered from the operation itself, who still require dressings of the wound for weeks and possibly for months. For patients of little or no income these dressings should be done without cost. Visiting nurse service would seem to be the solution. Frequently, also, private doctors are glad to turn over such dressings to the visiting nurse, doing the dressings themselves only often enough to keep track of the progress of healing. Apparently, little such service is rendered by the Cleveland Association, although there is presumably considerable need for it. Indeed the Association should be called on for a wider service of the kind.

It is desirable that the hospitals should send the regular clinic agents to call on patients merely to secure their return, or where there are special medical or social conditions which the hospital has studied and with which it is in touch. But all patients leaving the hospital who need medical or surgical care are appropriate patients for the Visiting Nurse Association and an effort should be made to have the hospitals refer them to the Association.

Observation of a limited number of home visits showed the quality and character of nursing care to be excellent, being careful and thorough, and done with much gentleness, where the work of the nurses in their districts was observed by the investigator. Marked kindness, sympathy and interest was shown by the nurses in most cases. It was apparent, however, that the actual nursing care given was of first importance in the eyes of the nurses; and that they failed to consider the health of the whole family as part of their responsibilities and did not take sufficient advantage of opportunities to teach prevention of illness, or home and family hygiene.

The records of the Association, however, show that a substantial amount of attention was devoted to social diagnosis and treatment, since practically 25 per cent of the patients cared for between October, 1918, and October, 1919, were referred to hospitals, dispensaries, or other health or social agencies.

While undoubtedly the giving of nursing care is the prime function of a visiting nurse association, it seems clear that more teaching could be done by the Cleveland staff without lessening the quality or quantity of nursing care.

Many opportunities also present themselves to secure or advise treatment—medical, surgical, dental, optical or hygienic—for members of the family not coming within the range of the school, municipal or industrial nurses. While the statistics in Cleveland do not show the amount of such work done, none of the visiting nurses who were accompanied in the districts seemed to be taking advantage of these opportunities as vigorously as they might.

In the opinion of the Superintendent of the Association the sick among the poor are receiving adequate care and are being brought to the attention of the Association, through its cordial relations with other social remedial agencies and their frequent calls. There are, however, no statistics to show the number of patients so referred. The Superintendent thought that the pay service had not reached its maximum usefulness, and that a decided extension of this service was needed, and would be of benefit to and well received by those of small and moderate income.

PRENATAL NURSING

It was found that prenatal care was being extended to patients under the care of private physicians and to patients expecting to go to the hospital for confinement or to have a midwife. It was not given to patients under the care of an out-patient maternity service. It was stated that, although they engaged the doctor some time ahead, very few of the pregnant patients carried by the visiting nurses had medical oversight until the time of confinement. Hence the prenatal instructions given to those patients by the nurses, with the doctors' consent, are of special value as safeguards.

With the wide possibilities of benefit inherent in prenatal nursing both for the individual mother and for the community, this nursing service should go further than it now does. Visits are a month or more apart, instead of every ten days or two weeks as they should be for the best results; no urinalysis is made or blood pressure taken, and instruction might be somewhat more thorough. The reason given was that the nurses did not have time to make frequent calls of sufficient length upon these patients. They would be glad to enlarge this service and could do so with great advantage if the staff were increased sufficiently.

MATERNITY SERVICE

The post-natal care given by the regular staff nurses was excellent. The work of the special obstetrical nurses was not observed, but judging from the high quality of the work of the rest of the staff, it is presumed that this was well done also. This service is provided at any time to any home patient under the care of a private physician and able to pay the fee of \$5.00*. It is not provided to patients unable to pay this fee, since such patients are not

* This fee has been changed to \$7.00 since the investigation was made.

usually under the care of a private physician, but have hospital or out-patient maternity care, which provides nursing service. The maternity service of the Visiting Nurse Association, though still on a small scale (234 confinements in 1919), is steadily growing. It should be increased as rapidly as the staff can be increased to care for it.

FACTORY SERVICE

Two factories are in affiliation with the Visiting Nurse Association through contract, one being supplied with two nurses and the other with one through the Visiting Nurse Association. These nurses were former members of the visiting nurse staff and are still supervised by its superintendent and her assistant. They send to the Association a monthly statistical report and attend the staff meetings. During the factory nurses' illness or vacation, the Association supplies a substitute. The factories pay the Association for this service, including salary, equipment and carfare, and the Association pays the nurses, who wear its uniform. In the past such an arrangement was maintained with six factories, but four have discontinued it. It is highly desirable that the Central Nursing Committee work out a plan for some agency to assume this activity. Supervision of the 104 industrial nurses in Cleveland is urgently needed. (For further details of nurses in industry see Part VII.)

OUT-PATIENT MATERNITY AFFILIATION

Up to January, 1920, both the out-patient maternity service of Western Reserve and of St. Luke's were in affiliation with the Visiting Nurse Association. Formerly this meant that the Visiting Nurse Association selected the nurse, but recently the hospitals have selected the nurses, and they have had their selection "regularized" by passing their credentials through the Central Committee and the Visiting Nurse Association. This affiliation has come to be only a form since the Association does not select or supervise the nurses or have any authority over their work. All that remains is that the nurses' salaries are paid through the Association. There appear to be no advantages in this arrangement, and it is clearly a disadvantage to the Visiting Nurse Association to be responsible for a piece of work over which it has no authority. January 1st this affiliation was discontinued with St. Luke's, but continued with Western Reserve.

The Medical College had a gift some years ago for a memorial nurse, the "Powell Nurse," for its out-patient maternity service. The College believes there was a stipulation that the nurse should come through the Visiting Nurse Association, and is therefore unwilling to discontinue this perfunctory affiliation for fear of losing the right to this gift. It would seem that such arrangements should be abandoned in favor of a city-wide single prenatal service, recommendations for which are given elsewhere.

PILGRIM CHURCH SERVICE

Pilgrim Church pays \$500.00 a year towards the salary of one nurse to care for the people in the neighborhood of the church. The church endeavors to serve a non-sectarian group. The nurse has her office in the church build-

ing, at the request of the church, in order to make a place where the neighbors can be cared for. She does many dressings in her office, and also inspects and watches over the church kindergarten. The church has marked out the area in the city which it wants her to serve. This area is not an appropriate one in relation to the rest of the West Side district. Nurses going into one district must frequently cross this district. The western section of it is more accessible to one of the other districts.

The nurse does not report to the West Side office or keep her records there, the latter being kept in the church office.* The supervisor of the West Side district, therefore, must come to the nurse's office in order to see her or to go over her records. The result of this arrangement is that the nurse works almost alone and receives very little supervision and assistance.

This arrangement appears to be inadvisable, both from the point of view of policy and of administration. As a matter of policy, it would be awkward, if contributions were to be received from other churches, to permit them to determine the location of the nurse's district, and to have her office in the church. This would result in confusion and disorganization of the present well planned system of the Visiting Nurse Association. The precedent, therefore, seems to be a bad one. From an administrative point of view, the result is the undesirable isolation of one of the members of the staff, cutting her off from intercourse with other members and from the assistance and oversight of her supervisor; also the necessity of maintaining district boundaries which are exceedingly disadvantageous to the management of the work in the West Side district.

SERVICE OUTSIDE OF THE CITY

Lakewood has its own Visiting Nurse Association, which is affiliated with the Association in Cleveland. It has a separate Board of Trustees, who raise funds, determine policies and administer the work. The nurses, however, are supplied by the Cleveland Association, which also supplies substitutes when needed. Salaries are paid through the Cleveland Association. These Lakewood nurses attend the staff meetings of the Cleveland Association, and are supervised by the superintendent of the Association or her assistant. They wear the Cleveland uniform and send a monthly report to the Cleveland Association.

Bratenahl Village, a well-to-do residential section, pays the Association \$250.00 a year to have a nurse call twice a week at the school to inspect the children. There is also a school doctor, who attends occasionally. The nurse does little home visiting.

Analysis of Administration

The administration of the activities of the Visiting Nurse Association seems to be well planned, systematized and carried out. The main office and sub-stations are managed in a smooth, businesslike way and for the most

* Since the recommendations of the Survey were received the records have been removed from the Pilgrim Church and the Pilgrim nurse reports three times a week to the West Side Station.

rt the record systems seem to be adequate, fairly simple and kept up-to-date. The amount of clerical work required of the nurses has been reduced a minimum.

No record is kept of the source of calls, making it impossible to analyse frequency and amount of the use made of the Association by other agencies. An annual analysis of the sources from which calls come would be illuminating. It frequently shows that certain agencies are not calling upon the Association at all, or not as frequently as they might, or that agencies with whom close relations were supposed to exist have in reality made few calls on the Association. It gives definite evidence of the number of dismissed patients turned over to the Visiting Nurses by the hospitals. It shows to what extent the doctors are making use of the nurses. All the members of the Visiting Nurse staff interviewed indicated that the doctors were giving the Association excellent cooperation, but there were no statistics to prove the fact. A tabulation of the sources of calls would give all this information, and afford a definite basis on which to determine where the service could be built up.

There is a cheerful, dignified spirit among the members of the staff, both in the stations and in the districts. Devotion to the work seems to be genuine and whole hearted, and it is quite evident that the officers and staff of the Association are working constantly to insure a dependable quality of service. The harmony that exists among the supervisors and their constant oversight of the work in the field tend to stabilize the service and to insure to patients skilled and carefully planned services. The supervisors make every effort to insure the best of care to the patients without overworking the nurses. While only four nurses were accompanied in the districts, one of whom did not come up to standards, the work observed bore the marks of consistency, honesty and well grounded preparation.

Two or three factors, however, tend to diminish initiative and ability to plan and manage on the part of the staff nurses. These factors are the following:*

(a) In two districts the supervisors allow the nurses too little planning of the day's work. The nurses make out a list of their calls, and the supervisor then changes the arrangement of them as she sees fit, or decides which patients are to be seen and which are not. This takes away from the staff nurse the necessity of planning her own work and of managing and performing it in a way to bring about the best results. It lessens her sense of responsibility and makes her very dependent upon her supervisors.

(b) The unit of the organization so far as records are concerned is the supervisor's district and not the staff nurse's district. The districts occupied by the staff have no name, letter, or distinguishing mark and no identity. The list of patients and the statistical report of the work is made out for the whole district covered by the supervisor and not for the smaller districts in which the nurses themselves are working. This means that there is no

* Since the Survey recommendations were received the following changes have been made. Every staff nurse now has her own district, keeps her own day-book, makes out her own monthly statistical report.

way of picturing the work in each nurse's district as a single piece of work; no method of measuring the work performed by individual nurses, consequently no basis of comparison and no basis for pride in accomplishment. This does not tend to build up individual initiative, or the spirit of competition with the work of other members of the staff. No use is made of the census tracts of the city in outlying districts, either for the individual nurse or for the supervisor's district. These fundamental districts as arranged for use by the census should be used as units or by multiples for the Visiting Nurse Association administration as for the district subdivisions of every other private and public health agency.

(c) In two districts many of the nurses make a practice of returning to the station three times a day.* This is a waste of time, and again weakens the nurse's sense of responsibility for her work. The tendency is for her to go to her supervisor constantly for advice rather than to think out her problems herself.

While there is thus no lack of supervision and in some cases too much supervision in the administration of the work, there might to advantage be even more supervision than there is in the home visiting. A study of the supervisors' record for two months showed that during one month supervisors went into the districts with the staff nurses 33 times, and the second month 34 times, visiting in the first month 64 families, and in the second 114; yet in one month four nurses were not ever accompanied by the supervisor, and in the other month six nurses were unaccompanied.

According to this record the supervisors spent an average of about one-third of their time in the field, but not more than half of this was spent in accompanying the staff nurses. The supervisors appear to make visits alone in the district. This is not desirable practice, as it means that the nurses are deprived of the supervisors' guidance in such cases and that the supervisors are handling alone the most difficult situations, instead of using them as teaching opportunities.

A good feature of the work is that the supervisors regularly attend the case conferences held by the Associated Charities. It is desirable that the staff nurses who occasionally attend these conferences, should also do so regularly.

The nurses average seven and a half calls a day. If the nurses did not return to the office so often more work might be accomplished without interfering with its finish. With an enlarged staff and a saving of the nurses' time in going back and forth, especially in the outlying districts, the activities of the Association might be doubled and many more persons get the benefit of the fine services offered.

Experience in many communities has proved that until the city is able to take over these nursing services in full, private organizations must perform this function of helping save life and restore health. The overwhelming majority of sick persons must be cared for in their homes; a very small pro-

* The nurses now are required to go to the station but once a day.

2. Inspection of pupils by class rooms.

After the summer, Christmas and Easter vacations, the children are inspected, a room at a time, by the doctor and nurse, for signs of communicable disease, skin disease, running ears, or pediculosis. Once a month the nurse makes a similar inspection, devoting about 7 to 10 minutes to an entire roomful of children.

3. Securing correction of defects found through the examinations by means of:

Notes and messages sent to parents,

Consultations with parents at the school house,

Visits to the home.

4. Maintenance of "dispensary hour" in each school for:

Treatments,

Dressings,

Emergencies,

Inspection of excluded children.

5. Health talks to individual pupils.

6. Health talks to classes in class rooms.

The Staff

The staff of the nursing bureau consists of:

1 supervisor of nurses,

2 field nurses,

30 staff nurses,

6 junior health workers,

2 stenographers (part time only).

There is a central office in the administrative building, but there are no ranch offices.

Analysis of Activities

EXAMINATION OF CHILDREN

Since these examinations are made by the medical inspectors they need no comment in a study of nursing work. They are made rather rapidly, usually without the taking of medical histories, and except in a few instances, they are not complete examinations. Moreover, most of the corrections recommended are routine recommendations, such as removal of tonsils and adenoids, and treatment for dental and visual defects. It would seem,

- (c) 1 That one automobile be provided for each sub-station for use especially in the outlying districts; thus also making possible more frequent visits of the supervisors, especially to the outlying districts.
- 2 That as an alternative, the nurses in the outlying districts be provided with a sub-station, and come in to the district station only two or three times a week. To these outlying districts the older and more experienced nurses should be assigned.
- (d) That the Pilgrim nurse report to the West Side station and that the boundaries of the Pilgrim District and the neighboring districts be changed to bring about a more advantageous arrangement. The nurse could still maintain a dispensary service at the church if desired.
- (e) That the individual nurses' districts be made the unit of work, giving them a fixed number or letter, and requiring a statistical report for each of these units monthly, and that the unit of district work be the official census tracts, singly or in multiples.
- (f) That the individual nurse report to the district office only once a day.
- (g) That the amount of supervision of the nurses in the field be increased and be lessened in the station.
- (h) That the nurses attend Associated Charities' case conferences more frequently.
- (i) That methods be devised of developing the individual initiative and resources of the nurses (a weekly round table is suggested for the discussion by the staff, of district problems, case work, and allied subjects.) The nurses themselves might well plan and conduct these round tables.
- (j) That a record of the source of calls be kept.

Nursing Service of the Board of Education

IN school nursing, as in the other branches of public health nursing, Cleveland is fortunate in having, through the agency of the Central Nursing Committee, a high professional standard. In school nursing, as in the other branches, a valuable demonstration of work has been made. A fine spirit and diligent application have been found throughout the department. The failures which have disclosed themselves in the course of this investigation are in the main due to the same causes as those in various other organizations studied: that is inadequacy in numbers and faulty supervision. Yet there is every reason to think that with adequate enlargement of the staff, with proper supervision, and with a change of emphasis in the work to reduce some of the less important activities and strengthen the more essential features, a school nursing system second to none can be built up.

Scope of the Work

1. Assisting medical inspector with physical examination of children.

Every school child receives one examination a year; some of those found to be defective are examined more than once.

2. Inspection of pupils by class rooms.

After the summer, Christmas and Easter vacations, the children are inspected, a room at a time, by the doctor and nurse, for signs of communicable disease, skin disease, running ears, or pediculosis. Once a month the nurse makes a similar inspection, devoting about 7 to 10 minutes to an entire roomful of children.

3. Securing correction of defects found through the examinations by means of:

Notes and messages sent to parents,

Consultations with parents at the school house,

Visits to the home.

4. Maintenance of "dispensary hour" in each school for:

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Dressings,

Emergencies,

Inspection of excluded children.

5. Health talks to individual pupils.

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EXAMINATION OF CHILDREN

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therefore, that the school nurses might be released from attending the doctor during these examinations, and be replaced by junior health workers, thus saving much of the nurses' time for more productive work. Where less obvious and simple conditions are found, and treatment is more technical and personal, the nurse should consult with the doctor, in order to receive more detailed instruction than is written on the record.

INSPECTION OF PUPILS BY ROOMS

The nurse spends an hour or more each school day in making room inspections, for the purpose of detecting skin lesions, running ears, pediculosis, and symptoms of communicable diseases. These examinations of an entire roomful of children are completed in 7 to 10 minutes. On account of the preoccupation of the nurse with other duties, even these necessarily superficial inspections can be repeated only at intervals of about 4 weeks. Between examinations the teacher must be relied upon to notice symptoms and to refer children to the nurse during the "dispensary hour." Since previous training and experience in such work cannot be expected of teachers, the nurse should not only determine the physical condition of the children at the time of her visit, but should also confer with the teacher and instruct her, so that she may render this service to the best of her ability during the long intervals between the nurse's visits. Teachers who are cooperative and become fairly proficient will need less frequent visits from the nurse, and more attention can be given to school rooms of those who are new or less interested. This cooperation between the nurse and the teacher should result in more effective supervision of the health of the children day by day, than is now possible.

CORRECTION OF DEFECTS—LACK OF HOME VISITING

The most important activities of school nurses are arranging for the correction of defects, the improvement of conditions personal or environmental causing defects, and the establishment of better health habits.

In the case of many children, a real remedy for an abnormal condition cannot be prescribed until the child's environment has been studied. Change in the mode of living is often essential not only to the correction of physical defects, but also to the complete restoration and maintenance of health. These changes in living can be accomplished in most cases only by thoughtful persuasive visits during which the nurse may talk over the child's condition at length with the parent, may discover what influences in his home life are harmful, or what may be wrong in his hygienic habits, and may advise the mother thoroughly and carefully concerning any changes needed. Such visits are the very heart of school nursing.

Thus, for instance, a boy in one of the Cleveland schools, who had had skin trouble since babyhood, had been to many doctors and dispensaries without relief. It was discovered by the nurse in a home visit that his diet consisted chiefly of tea, coffee and sweets. "We've plastered him with the things the doctors were experimenting with," said his family, "but nothing helped until you got after his food."

and practised, the staff will have many problems to consult her about. At present they have few.

It is important to have monthly statistical reports made by each staff member, studied and corrected by each supervisor and then referred to the superintendent or director. At present daily reports are made by the nurses, these are summarized monthly in the main office. A personal record of efficiency and personality of each of her staff should be prepared by the supervisor, after careful observation of the nurse and study of her work, and submitted every three months to the director, for permanent record. Records should be prepared monthly for new nurses for the first three months.

Some measure the deficiencies apparent in the work are due to the fact that the number of nurses and supervisors is inadequate. But from the point of view of administration it is clear that the most serious weaknesses in the work arise from the failure to appreciate that the supervisor is to be a leader and consultant, whose duty it is to develop her staff, to help them see and solve their problems, to train their faculties and correct their mistakes, to evaluate their work and its results. The absence of such supervision is evident in the nurses' work, which is often routine in character, lacking in originality and in grasp of opportunity.

NURSES

The staff nurses seem to be faithful, honest workers, performing their duties conscientiously, but it is quite obvious that they lack sufficient supervision.

They clearly show a lack of leadership and development.

They have too many children (approximately 3,000 per nurse) and too many school duties to accomplish the very necessary home visiting. The ratio should be increased to give a ratio of 1 nurse to every 2,000 children, and a junior health worker is provided for each nurse. Otherwise the ratio should be one nurse to every 1,500 children. There might be provided with benefit to the service one "floating nurse" under each supervisor to take the place of sick nurses.

JUNIOR HEALTH WORKERS

These workers seem to be of a unique type, originated and developed in India, and, on the whole with very good results, which are largely due to them being well educated. All of them are college graduates.

They have relieved the nurses of much routine work in attending the children during examinations, have been responsible for getting dental defects corrected, and have taken many children to dispensaries. There seems to be no reason why all of this work could not be given to them. Placing one junior health worker with each nurse would result in freeing the nurse for more important duties.

On the other hand, to allow home visits to be made by these workers, and to refer information about children to whom Binet tests have been given, and those referred to dispensaries, appears to be a mistake. Such visits, especially the first named, give much opportunity for constructive health education and require a trained discrimination in observation of health as well as social conditions. They should, therefore, be transferred to the nurses.

HEALTH TALKS TO CLASSES

These talks on health habits could be very valuable if given according to a definite graded schedule and system, in a regular orderly fashion. There is a great difference in the subject matter and manner of presenting it to first grade pupils and eighth grade pupils. The present unstandardized, ungraded, and unsystematic method renders these talks of little value. They should be made a definite part of the curriculum of every grade, and should be given by the teachers whenever the nurses do not have time to give them in this way. The present staff would not have time to give such systematic instruction.

Analysis of Staff and Administrative Methods

SUPERVISOR

The supervision of this nursing service is lodged in the hands of one supervisor and two field nurses. While the spirit and intentions of the supervisor are excellent, there are certain marked shortcomings in the conduct of the work. Not only are there too few supervisors for the size of the staff, but the purpose and aims of supervision are apparently misconceived.

It would assist the supervisor to carry the responsibilities of her position if she were advanced in rank. She should have the title and salary of director or superintendent of nurses.

FIELD NURSES

One field nurse has eight nurses assigned to her, and in addition is responsible for staff nurse duties in one school and one eye clinic. She therefore gives only half her time to supervisory duties. The other field nurse has 22 nurses under her.

The field nurses in their supervisory capacity are expected to visit only those staff nurses who have been newly appointed, or who are thought to need special supervision. Last year several of the staff nurses received no supervisory visits from a field nurse.

Both of these nurses spend much of their time in substituting for sick nurses and the rest in training new nurses and laboring with poor ones. The good nurses have, therefore, none of the benefits of supervision.

Radical change is needed here. These nurses should have the rank, title, position, and salary of supervisors. None of them should have any staff work to do as is now the case on the West Side. As a matter of routine they should spend two half-days a month with each of their staff nurses, one half-day with her in the field, and the other half in the school.

To make proper supervision possible, it will be necessary to increase the number of supervisors. There should be one supervisor for every ten nurses at most.

Each supervisor should have an office in her district. She should be responsible for the management of her district, and the work of the nurses in it. She should hold definite office hours, when any of her staff can find her for consultation. The staff should be encouraged and expected to consult her frequently about case work. When the value of case work is

at and practised, the staff will have many problems to consult her about. Presently they have few.

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CONFERENCES

In order to promote the enthusiasm and inspiration which comes from the rivalry, competition and spirited discussion of new and live topics, weekly meetings of the nurses are held each Saturday morning, of the whole group or of sections of the nurses according to the size of assembly rooms available at the headquarters or elsewhere. Unless interest in these meetings is well maintained, perhaps in part by bringing in outside speakers as occasion offers, but chiefly by prepared discussions by members of the staff, the object of the meetings, that is, the building up of *esprit de corps* and unity in the staff, will be missed. From time to time these should be turned into carefully prepared case conferences, at which certain cases presenting difficulties, solved or unsolved, should be presented. Such conferences will do much to arouse in the nurse a sense of the importance of good case work and a knowledge of the way to go about it. For the same reason the nurses should be encouraged to attend the case conferences of the Associated Charities.

RECORDS

At present there is little coordination in the records. The child's individual record is kept in the school room. This record is very brief and tells little of what is done for the child. The doctor's orders are on this card. The work done by the nurse is usually, though not always, entered on the correction slip in her file. Home visits are kept on still another card. An effort to check the nurse's accomplishment against the doctor's recommendation is almost hopeless.

The individual health record of the child is kept on the teacher's desk, supposedly to keep the teacher informed of the child's physical condition. These records follow the child from room to room together with his school record. The teachers, however, are uninterested because nothing appears on this record that would give them a clear idea of the child's physical condition. Therefore, it would seem much more intelligent to have this record kept in the dispensary with the other records, and have them so arranged that it would be possible to know the entire performance of health work in regard to each child, unless, as proposed on page 312 of the child health report, the records in the school room include all items of the child's health history as they should.*

The method of using the correction slips for notations of home visits and corrections accomplished is exceedingly bad. It does not make for permanency, and there is no way of using them as a basis for statistical study. The absence of a monthly report from the nurse is also a factor in making it difficult to know what the nurse has actually accomplished. A simple, accurate, and comprehensive report should be made by the nurse every month as a part of the whole statistical report. In no other way can she keep a check on her own activities, know what she has accomplished, and measure her progress.

RECOMMENDATIONS

The following recommendations are directed toward concentrating the work of the nurses on the more essential activities, which they alone can conduct.

* A new cumulative record card has already been developed.

entrusted with the nursing care which in other parts of the city is given by the nurses of the Division of Health. Owing to the character of the population there is little call for hourly nursing.

Because of the difference in the size of their respective districts, it is difficult to compare the amount of nursing done by the University District staff with that of the Visiting Nurse Association. Apparently there is little difference either in volume or quality, except that, because of the generalized character of their nursing, the University students are able to give more attention to the family as a whole. Certainly visiting nursing has not suffered by being made a part of this generalized service.

Owing to the higher ratio of nurses to population in this district, the attention given to sick babies and tuberculosis patients can be more regular and thorough than that given elsewhere by the nurses of the Division of Health. As much emphasis is put on nursing care as on any other aspect of the work, and full provision is made for it. In fact, as high a standard of care is given to these patients as to other bed patients at home.

CHILD HYGIENE

This service in the University District is similar in scope to that of the Nursing Service of the Division of Health. One or two exceptions are noted; all babies whose births are reported are visited and cases under the care of a private doctor are not dismissed.

In January, 1920, there were 510 well babies attending the Prophylactic Clinic, 1,885 well babies not attending the clinic, 843 sick and convalescent babies attending the Babies' Dispensary and Hospital, and 21 babies under private doctors; a total of 3,259 babies under three years of age, or about 100 babies to each student nurse. Two or three children are often in the same home. The babies attending the clinic regularly are visited two or three times every six months. Sick cases are seen daily, or as often as necessary. Well babies not attending clinic are seen when possible, sometimes two to six months elapsing between visits. The director and instructors think it is worth while to carry these well babies even though they are not seen frequently. The records show that the average is five visits a month per baby. The record also shows that a large proportion of the new babies taken on each month are discovered by the nurses themselves as they go about on other errands among their families. The best of nursing care, as has been stated above, is given to sick babies. It would be desirable to have well babies likewise visited more frequently.

TUBERCULOSIS

The scope of tuberculosis work done by the University District corresponds with that done by the Nursing Service of the Division of Health. There is no tuberculosis clinic in this district, patients being referred to Health Center No. 2, unless able to have a private doctor.

It was evident that the patients were being well cared for and kept under watchful supervision. But although the nurses are willing and able to give

teaching staff. The area coincides with Health District No. 8, estimated at 60,000 to 70,000 population. It is one of the most congested and poorest parts of the city.

Analysis of Administration

STAFF

The director of the course and of the field work is a public health nurse on the University payroll as an assistant professor. She teaches one course at the University and is in general charge of the district, teaching and supervising the students and performing all the administrative duties. The director's duties are many and difficult, and are indeed beyond the capacity of one person. A full-time assistant director is needed to take over many routine matters, so that the head may have free time for the more important duties of her position.

Assisting her are five nurse instructors, one of whom is designated assistant director, with limited administrative duties. Each instructor is a public health nurse in charge of a part of the district and responsible for the students assigned to her area. The district is thus divided among these five supervisors, as is also the management of the clinics held in the district. Each instructor is in addition responsible for the teaching of certain practical subjects, particularly those in which she has had special experience.

There is no other permanent staff. With the exception of school nursing and out-patient maternity work, nursing in the district is done by the students of the course as a part of their training. The number of students actually at work in the district at any one time varies. There are graduate students who are taking the full course, and others who are taking only the four months' practical work. There are also ten undergraduate students sent from nurses' training schools for two months' experience. The highest number in the field during the past year has been 33 and the lowest 10.

There are also an office secretary, a business woman, who is responsible for many business details, and three typists.

PLAN

The district is divided into five sections, each in charge of an instructor. These sections are again divided into sub-sections, one for each student nurse. The number of nurses in each section ranges from two to six or seven. Each student nurse has full responsibility for her sub-section in which she carries on a generalized service, under the direction of her instructor.

Analysis of Activities

VISITING NURSING

General visiting for free, part-pay and full-pay patients and for Metropolitan Life Insurance policy holders is carried on in this district exactly as done elsewhere by the Visiting Nurse Association, with the exception of attendance at confinements and minor operations. The student staff is also

entrusted with the nursing care which in other parts of the city is given by the nurses of the Division of Health. Owing to the character of the population there is little call for hourly nursing.

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all the bedside care necessary, they find that little is needed. Most of the cases are ambulatory, many of them working, and very few bedridden. Advanced cases are persuaded to go to the hospital. It is believed that there were many bedridden cases in the district not under the care of the nurses, the fact would be known. The nurses are eager to find all such patients. Just as in the case of children, the nursing is far more adequate and of a higher standard throughout than that given by the nurses of the Division of Health.

The nurses believe that they are in touch with the majority of cases showing marked symptoms, but that there are probably a number of other cases missed for the following reasons:

1. Because the men are away at work all day when the nurse is about, and no one in the family thinks that they are sick enough to report to her.
2. Because early cases conceal the fact that they are losing weight or showing symptoms, and unless a nurse happens to see them she is not told of them by the patients or family.
3. Because patients, both incipient and advanced, have more money than before the war and go to private doctors who often fail either to diagnose the case, or to report it. Patients, moreover, change doctors frequently and are often not under observation long enough to give them a chance to diagnose or report the case, or else the doctor does not tell the patient what is the matter, for fear he will go to another practitioner. Many such cases used to go to the dispensary.
4. Because the district includes many people of limited education and opportunity, the last to appreciate a subtle or hidden danger.

For the same reasons the nurses believe that they are getting only fair results in their efforts to persuade positive and suspicious cases and those who have been exposed to infection to go to the tuberculosis clinic.

Similarly the nurses find it difficult to persuade members of the family to be examined; they refuse to see the necessity of going to a clinic if they feel well.

Patients soon grow restless in the hospitals. They complain of poor food or of being lonesome, and come home as soon as they are a little better, long before their malady is arrested. Many go back to work soon after returning home.

A report of January, 1920, shows that out of 209 positive cases on the books, 159 were attending a clinic; and out of 1,060 suspicious, non-tuberculous and exposed cases, 881 were attending a clinic.

The records further show that the average number of visits per month per patient for the whole group is only .3. If the visits were restricted to the positive cases only, the average would be 1 visit per month per patient. From this it is plain that the visits should be more frequent. At present each nurse averages 30 patients, under observation.

COMMUNICABLE DISEASE CONTROL

The Division of Health reports all communicable diseases, except small-pox, promptly to the University District. The nurses visit all of them, reportable and not reportable, for the following purposes:

To place and remove placards.

To instruct in care, isolation and prophylaxis.

To issue work permits.

To give nursing care.

To take cultures.

To maintain quarantine.

The nurses find that through this work they have an excellent chance to give care, to teach, and to be helpful to the family when most needed. The nurses perhaps lose some of their popularity because of restrictions which they must place on freedom of movement, but on the whole the family does not harbor resentment against them.

No great amount of nursing care is needed because both private and city doctors send most of the very sick cases to the hospital. The District service is willing and prepared to give as much nursing care as is needed. Teaching the family and caring for the patient are considered of as much importance as maintaining quarantine, issuing permits, or taking cultures. Nursing care has been given to the few cases of typhoid which have been reported. Pneumonia has not been reported to the University District by the Division of Health. It would seem well to have these cases reported also.

This work occupies about one-sixth of the nurses' time.

PREVENTION OF BLINDNESS

The University District provides care for trachoma cases, but has not undertaken to be responsible for ophthalmia neonatorum.

MIDWIFE SUPERVISION

This service has not been taken over for the Division of Health.

SUPERVISION OF BOARDING HOMES FOR BABIES

There are only four of these homes in the District, and they receive the same oversight and supervision as other homes in the District in which there are babies. There is no doubt that more care and supervision should be given to this group of infants.

PRENATAL NURSING

The nurses find most of the pregnant cases while they are out in the District and in the homes. Doctors do not report very many, and midwives

only a few. Births reported from this district to the Division of Health in 1918 were 1,618; for 1919 the figures were not obtainable. In 1919 the University District had 479 pregnant women attending clinic and almost as many more under supervision at home. In the opinion of the director, one in every two pregnancies in the district is carried. About one-third of the births in the district are delivered by the Out-Patient Maternity Service, one-third by midwives and one-third by private doctors. Private doctors send many of their cases to hospitals.

The nurses urge women who are not consulting a doctor to go to the prenatal clinic. They also send to the clinic private physicians' cases with the physicians' consent, and patients who expect to have midwives. A prenatal clinic is conducted twice a week at Health Center No. 8. The nurses try to visit prenatal cases at least once a month, and when possible once in three weeks.

The cases reported to the Maternity Hospital Out-Patient Service still attend the clinic and are cared for by the University District nurses. If they develop abnormal symptoms they are turned over to the nurses of the Out-Patient Service. There has been some duplication of work by the nurses of these two organizations.

Patients are referred to private physicians for maternity care, if able to pay the fee of \$50.00. If not, they are referred to one of the two Out-Patient Maternity Services. Post-natal care is given by the Out-Patient nurses. As this service is popular there is not much maternity service left for the nurse of the University District. This is a disadvantage, as the students need adequate practice in this field. On the other hand, the University District alone has as many pregnant patients under supervision as there are under prenatal care in all the other districts of the Division of Health combined.

SCHOOL NURSING

No school nursing is done by the University District. It does not seem possible for the present staff of the University District to undertake as intensive work in the parochial schools as is now given in the public schools by the Board of Education. The students get their education in this branch of work under the Board of Education. It is deemed a wise decision that the University District should not undertake school nursing, unless the number of student nurses is increased.

CLINICS

No tuberculosis clinics are held in the University District. It is hoped that it will soon be possible to hold such clinics. Prophylactic baby clinics are held three times and prenatal clinics twice a week. These clinics are conducted for all purposes except medical services, by the instructors of the University District for the purpose of giving the public health nurse students experience in managing clinics and familiarity with clinical resources. This experience is indeed valuable for the students, but it puts a great deal of responsibility upon the nurses who are already carrying a heavy burden as

tors and supervisors of the districts. One instructor spends on an average eight hours per week in her clinic, and another spends an average of ten hours, in addition to the full day given every month to balancing the books and compiling the milk report. These instructors must prepare the clinic, do a large share of the clerical work (volunteer help has been satisfactory and paid clerical help has been irregular), teach nurses on duty in the clinic and assume the entire responsibility of its maintenance and success. A physician is in attendance at each clinic session.

In order not to have the burden too continuous, rotation has been arranged among the instructors, but this does not lighten the volume of work. It merely changes the personnel. If the high standard of work in the teaching clinic, for which the instructors are largely responsible, is to be kept up, it should not be required to give this time to the dispensaries. In order to maintain this service under the University District, however, a special instructor for the dispensary should be appointed. This will in any case be necessary when a tuberculosis clinic is opened. Such an instructor would very materially relieve the pressure on the other supervisors and make possible the implementation of newer principles and procedures in this important activity.

Supervision

The object of supervision in public health nursing is to detect weaknesses and develop strength in the nurses; to protect the patients; to prevent overwork of the nurses; to coordinate and utilize to the best advantage the energies of the staff.

The criticism has been brought against the University District that it employs too many instructors or supervisors. This question received earnest consideration, but evidences of over supervision though carefully sought, were not found.

The director of the District, in accepting the responsibility of furnishing nursing care to everyone who needs it within this District, must first consider that with a constantly changing staff of nurses, the standard of nursing cannot be consistently high and uniform. She must also consider how the demands for nursing can best be met without exploitation of the staff, who in this District are all to be regarded as students in training.

A ample proof was given that the character of the supervision is excellent. The excellence was shown by the way in which the possibilities of nurses of variously of different calibre were developed. Even the less well trained nurses of less native ability showed in their work clear evidences of good nursing. It is probably due to the intensive work of the staff of instructors that the nursing standards of the University District have been high, that the public's interests are most carefully guarded and that the nurses have been protected from too much work in the field.

General Summary

The character and volume of the work in the University District prove the value of the nursing program which is almost completely generalized except for

school nursing can be carried out with excellent results. No branch of nursing undertaken has suffered from its merging into this general service. An excellent quality of service is given in all types of disease. Prenatal nursing is more vigorously developed than in any other district. Care of tuberculous patients and sick babies is as thorough and constant as for other patients. It should, however, be said that visits for instruction and prevention should be more frequent. A larger number of students would make this possible. All communicable diseases, except smallpox, are attended and preventive measures are emphasized. In fact, the work throughout is painstaking, conscientious, intelligent and of high quality.

The University District has proved also that it is possible to care for a district satisfactorily without a permanent staff other than the instructors. It has been shown that continuity of service can be maintained through the instructors and that the students are capable of carrying responsibility for a part of a district and receiving the best training and development by so doing. The supervision, training and leadership given by the director and instructors is of the highest quality.

It is evident, however, that the director and instructors in their efforts to be fair to patients and nurses alike are carrying very heavy responsibility. The method of remedying this has not revealed itself in so short a study, but requires careful consideration. In spite of the constant burden of work there is a cheerful devotion to duty that reflects itself in the work of the nurses in the field. An assistant director and instructor in charge of the clinics would relieve the tension appreciably.

The University District has been looked upon as an independent laboratory for experimentation in policies and methods. In so far as this adds to the teaching advantages, it is sound and advisable. Experiments which might jeopardize or injure the success of the students' experience and education should be tried elsewhere.

The fact that the district is a teaching district and that the work must have educational value has always been recognized and kept clearly in mind. For this reason the responsibility for the field work has, with success, been placed directly upon the students. On the other hand, the needs and prerogatives of the patients have never been minimized or lost sight of. The educational character of the work has proved to be to the patient's benefit rather than detriment, just as it is true that medical attention in hospitals attached to medical schools is usually better than in other hospitals. The students are, in fact, receiving thorough practice in public health nursing; the patients are receiving a very excellent quality of nursing service. Close study failed to disclose any indication of the exploitation of either group.

RECOMMENDATIONS

1. That the director be provided with an assistant on full time.
2. That an additional instructor be secured to take charge of the clinics.
3. That the number of students who can be accepted be increased.

The municipal nursing staff, is, as we have seen, greatly overburdened, and in need of reorganization in the assignment of work and supervision. The Division of Nursing is at present grappling with the problem of absorbing the duties with which it has been newly charged each year. It would, therefore, be inadvisable at this time to propose to add to it another and still larger undertaking. The city has neither funds nor facilities at this time to undertake responsibility for obstetrical and postpartum nursing care. Moreover, the city might not succeed in reaching patients under the care of private doctors, large numbers of whom have only moderate incomes, so that they cannot afford private nurses and must depend upon visiting nursing service. In 1919, as we have seen, the total number of births delivered by private doctors numbered 69 per cent of all births registered.

Only two other agencies have been seriously considered for city-wide maternity nursing service. These two are the Maternity Hospital and the Visiting Nurse Association.

MATERNITY HOSPITAL

The proposal to extend the nursing service of Maternity Hospital so as to offer a general prenatal and maternity service, does not commend itself for serious strong reasons. It would indeed appear to be a fundamental mistake. The Maternity Hospital has in the past performed a valuable service, such as is the function of a University hospital, in teaching the possibilities in this field and demonstrating the actual saving of life which goes with a prenatal, partum and post-partum service.

This hospital should continue to be, fundamentally and increasingly, a training field for nurses as well as for medical students, in the obstetrical field. To attempt to extend its community work and to establish a city service, instead of developing and extending its valuable function of training, would be to miss its proper office.

Moreover, the nursing service of a hospital by its nature does not cover the great majority of registered births, that is, those occurring neither in the wards nor under the out-patient department, but attended in their homes by private physicians or midwives. In 1919, of the total confinement cases reported in Cleveland, 37.2 per cent were delivered by physicians in the homes of private patients, and 30.8 per cent by midwives in the patients' homes, or an estimated total of babies delivered by these two groups, of 68 per cent.

But even if these points were not conclusive, certain weaknesses in the methods of work as at present carried on, would in a larger area be a serious drawback to good service. The nursing care of this hospital is characterized by a lack of continuity in the nursing personnel and by a lack of the best received type of supervision as described in other sections of this report.

LACK OF CONTINUITY

The lack of continuity is shown by the division of the work. Details of the organization of the Maternity Hospital clinics are given in the Dis-

pensary Report, Part X. Here the chief points of the nursing service are described.

The prenatal nurse, with headquarters in her prenatal station calls on the patient and makes observations until the time of delivery. The patient is then turned over to the delivery nurse of the hospital, who is taking a special course in obstetrics. She may be a pupil nurse, or she may be a graduate. She accompanies the medical student for delivery in the case of each primipara, in all other cases the delivery nurse goes, if any one of them is available. Thus all the advantages gained by the prenatal nurse from knowing the patient and having won her confidence are lost. The post-partum nurse must begin the acquaintance over again. The record system is not such as to give the help which might be given in keeping up the connection. The prenatal records appear to be inadequate in scope and poorly kept.

LACK OF SUPERVISION

Prenatal Care:

For prenatal care, four full-time graduate nurses are employed. They give service at the six prenatal clinics now operated, and spend the rest of the time on home visits. They average about ten calls daily, rising in some cases to fifteen calls. Where districts are densely settled and the cases happen to be so grouped that transportation does not require much waste of time, fifteen instructive visits may not prove to be impracticable, but in general more than ten prenatal visits a day will be found to result in sacrifice of thoroughness.

Moreover, though all patients are supposed to be visited every two weeks, and acute cases daily, it was stated in the course of the investigation that these visits are not regular. A normal case, attending the clinic regularly, may be seen at home only two or three times during pregnancy. The nurses carry in their bags blood pressure apparatus and equipment to make urinalysis. But these are not used for every patient visited, as the best practice requires. Abnormal cases are seen daily or every other day as indicated.

The Director of Nurses makes an effort to see every case which is reported to the clinic, but not necessarily with the nurses. Of supervision in the field, as developed for graduate nurse staffs in the best public health work, and essential as a stimulus as well as a guide, there is here none. Any abnormal cases are discussed with the Director of Nurses. Abnormalities found in home visits are reported verbally to the Director, who enters this information on the prenatal index card, made out when each new case is admitted; but there is no detailed weekly or monthly report kept by the nurse as a record of her own performance. There is no system by which the frequency of the patient's visit to the dispensary or the nurse's visit to the home is automatically checked up.

Delivery and Post-Partum Care:

This care is given by the student nurses under supervision of the assistant director. Each new nurse is taken into her district by the assistant

ut for only half a day. Thereafter, the assistant director drops in y during a period of about a week.

are four nurses doing post-partum work, each averaging about s daily. This number is, again, too large for adequate care and in the home. If labor occurs during the day, either the director istant director makes an effort to get into the home before the delivered. Each newly delivered case is seen by the assistant di-day after the confinement. Oversight of the patient's condition ired; but regular supervision of the nurses who, it must be remem- here students-in-training, is not accomplished.

bservation of five post-partum cases, it was evident that while als, such as care of the breasts, external irrigation, care of the received careful attention, the work was not up to the nursing observed by the Visiting Nurse Association or in the University Doubtless the unusually large number of cases carried by the Western dents accounted for this fact. The rooms were not left in as good sirable, no uniform is required, one nurse being observed at work a waist.

PNATAL AND POSTNATAL WORK IN A GENERALIZED SERVICE

rast to the specialized work of the Maternity Hospital, there is n Cleveland the example of an agency which includes prenatal generalized nursing service. This is the University District, 919 had 442 dispensary cases, which may be compared with 485 records studied at the Maternity out-patient department. The s of the University District nurses upon 442 dispensary cases 1 391 or 3.1 per cent per patient as against 271 visits upon 483 cases or .6 per cent per patient by the Maternity nurses. In the service, therefore, the home visits recorded were 5 times greater than in the specialized service. The average number of dispen-per patient recorded in the generalized service were much more han in the specialized (2.4 in the University District as against ernity).

paring the percentage of cases reached early in pregnancy, the District is again far in advance according to the records studied, ight almost half (46%) of its total cases under care by the sixth ile Maternity had only 19.2 per cent under care at that period y.

s apparent that the Maternity hospital records studied do not sent the quality of the service rendered by this institution, but as ent records of any service should be available as a basis for evalu- at service, the results of this study of records are given.

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This care is given by the student nurses under supervision of the assistant director. Each new nurse is taken into her district by the assistant

municipal staff. If the proposed Extension District of the Division of Health is established as is suggested elsewhere (page 769) for the extension of the municipal nursing work, it would be desirable to substitute for the Visiting Nurse Association the municipal nurses in that district, except for attendance at delivery.

As the assumption of this service in the Extension District of the Division of Health proves practical and successful, and as the whole nursing service of the Division of Health is built up to meet its present activities, and becomes able to assume new functions, the service might be turned over district by district to the Division of Health, or the prenatal service might first be turned over, the transfer of care during confinement and post-partum care being postponed.

RECOMMENDATIONS

It is therefore recommended:

1. That the Visiting Nurse Association give prenatal instruction and nursing care in the homes, reporting findings to and receiving instruction from the clinics daily. This service could be provided by the Visiting Nurse Association as a uniform service to all clinics.

2. That clinics be maintained under the proposed Obstetrical Council to serve the entire city by zones or districts according to agreement among the various hospitals, and that service within the clinics to be provided by the hospital wherever possible, by the Visiting Nurse Association where impossible.

3. That nursing care during confinement be provided by the Visiting Nurse Association (a continuous graduate staff for deliveries to be provided by the Visiting Nurse Association for this purpose), or by students of the hospitals under the supervision of the Visiting Nurse Association.

4. That post-partum nursing be provided by the Visiting Nurse Association for all clinics, or by student nurses under the Visiting Nurse Association.

5. That in the University District, for the Visiting Nurse Association, the university staff be substituted, except for attendance at delivery. That in the proposed Extension District of the Division of Health the Visiting Nurse Association be replaced by the municipal nurses, except for attendance at delivery.

6. That a uniform procedure be established for all districts and observed by all staffs.

7. That if the proposed Obstetrical Council is formed, a sub-committee on prenatal and maternity nursing from the Central Committee act as the sub-committee on nursing to the Obstetrical Council, and that the Central Committee be represented on the Obstetrical Council and vice versa.

Industrial Nursing

THE Survey of Industrial Hygiene in Cleveland has shown that there were, at the time of the investigation, seven full-time industrial physicians and 104 industrial and mercantile nurses. In 36 plants, 66 nurses were working with part-time physicians.

These figures indicate clearly enough the responsibilities of the nurse in industry, and the possibilities which lie before her in her contact with the

	Records of Dispensary Cases Studied	No. Dis- pensary Visits	Aver- age	No. Home Visits	Aver- age
Maternity.....	483	708	1.5	271	.6
University District.....	442	1084	2.4	1391	3.1
St. Luke's.....	141	No record of home or dispensary visits.			
Mt. Sinai.....		No record of home or dispensary visits.			

The University District thus in a small district and with a high ratio of nurses to population illustrates the possibility of including prenatal and postnatal care in a general nursing service for the sick which gives family care and instruction.

While it is true that fruitful demonstrations of special maternity services have been made in other cities, nevertheless an extension of the generalized nursing service for the sick is especially appropriate, since Cleveland has proved its ability to conduct generalized public health nursing with a considerable measure of success, as well as a true generalized nursing service in the fields of sick nursing and public health nursing in the University District.

THE VISITING NURSE ASSOCIATION

In the Visiting Nurse Association there is available an agency, doing generalized sick nursing in homes on a city-wide plan, with adequate and skilled supervision; which already makes a specialty of medical, surgical and maternity nursing,—excellently done and capable of further expansion.

This Association now serves all groups of patients, the poor and those of moderate income, midwife and private doctor's patients, as well as those intending to have hospital care.

For an extended program to provide general maternity care, this Association could provide service by a graduate nurse trained in visiting nursing, and could also provide supervision for student nurses if necessary. It would afford uniformity and continuity of service, the same nurses being available for all three types of care. Because of its large staff, small districts, and other nursing contacts, it could greatly increase the usefulness and adequacy of the clinics through the early discovery of pregnant patients, who would be urged to seek medical oversight at once, at the clinics. Such patients would also receive careful prenatal nursing at home if they could not be persuaded at once to attend a clinic.

For these reasons, the Visiting Nurse Association appears to be the logical agency in Cleveland to which the extended prenatal and maternity services for the city should be entrusted. It would mean a large expansion for this Association entailing large expenditures, and responsibilities with which the Association is well fitted to cope. No greater opportunity to serve the community, and indeed to demonstrate such a service to the whole country, could be offered.

After the demonstration had been made, it would be desirable and in line with past policy in Cleveland gradually to turn over this service to the

the nurse was not allowed to leave the dispensary. She was regarded by the management, and had learned to regard herself, as a permanent fixture of the first aid room, a mere mechanical agent for binding up cuts or wounds.

WORK OUTSIDE THE DISPENSARY

Ranging upward from this most limited performance, there were observed in Cleveland many varieties of work and of responsibility carried by the industrial nurse. In some plants the nurse had in charge, under the standing orders of the attending doctor, the entire first aid and emergency treatment, and was responsible for all records, follow-up, re-dressings, etc. In one such establishment the nurse made a rule of having the doctor, in his daily visit, see all new cases and all infections.

Procedures naturally differ as to the nurse's responsibility for such matters as plant sanitation and the safety of employees. While supervision of these matters is, in large plants, in the hands of specialists, in smaller factories such supervision was found to be a valuable part of the nurse's work, especially when combined with instruction of the employees in matters of sanitary equipment and safety.

SHARING IN PREVENTION OF ACCIDENTS

In contrast to the dispensary nurse and the repetition of cuts cited above, other nurses in Cleveland were taking part in the prevention as well as cure of accidents. One nurse regularly inspected the scene of accidents. While this might lead her beyond her field, when technical knowledge of machinery was needed, yet she had been able to point out obvious, overlooked causes of accidents such as bad lighting or the presence of an obstruction in the way of the employees.

The industrial nurse should have sufficient knowledge of the technical processes used in her plant to know and advise on the safeguards provided. Yet she is often totally uninstructed in such matters. On one occasion in Cleveland the nurse was found wholly ignorant of certain types of respirators provided for a certain process and hence incapable of advising the workers with regard to using them.

SHARING IN PREVENTION OF DISEASE

Constructive health work and ability to gain the workers' confidence so that they will consult her in matters of ill-health, incipient as well as acute, should clearly be the center of the industrial nurse's business. The other aspects of her work—first aid, safety, sanitation and welfare work—should all be directed to this general end. The aim of maintaining health and educating the workers—men and women alike—in matters of health should, indeed, distinguish the industrial nurse from other types of welfare workers. Individual instances of good work along these lines were observed in Cleveland, but as elsewhere, it was on the whole slighted and too often ignored in the multiplicity of other duties.

In many plants the nurse spends far too much time on recreational and welfare activities. Absorption in these is as alien to constructive health

large bodies of men and women who are congregated in industrial establishments.

Obviously, no hard and fast rules can apply to all types of industrial nursing; it must vary with conditions, with the size of plants, the type of management and of employe, etc. But under all these differences and with all the varied duties which the industrial nurse may legitimately perform, there should be one essential aim, common to all good public health nursing, that is, the maintenance of health and the teaching of hygienic habits.

With so wide a field before her and in a branch of public health work so new and unstandardized, it is not surprising that the industrial nurse has as yet, broadly speaking, scarcely found herself. She stands too often between the industrial physician, who for the most part regards her as a mere adjunct to the surgical dispensary, and the employer or his representative, in whose mind she is vaguely to function in creating better industrial relations in his plant.

The danger, therefore, is that industrial nursing will be diverted on the one hand into pure dispensary assistance, or on the other, into pure welfare work. In neither of these, though both may be part of her duties, lies the sole function of the industrial nurse. On her training and personality it will in many instances depend whether she develops a constructive type of work, enlisting the management's and workers' cooperation, or is submerged in the routine of first aid or of factory housekeeping or recreational activities.

The Nursing Survey made a detailed study of twelve representative industrial nurses in Cleveland to observe their work, the types of duties performed by them and the emphasis on prevention of illness and of accidents as well as on treatment. The establishments visited included metal working plants, food and clothing factories, public utilities, and department stores. Three of these plants had full-time physicians, the others had either a part-time or no physician.

WORK CONFINED TO FIRST AID

Several of the nurses observed were confined in their activities wholly to the first aid room; they were strictly dispensary nurses with no thought of responsibility beyond dressing injuries and no encouragement on the part of the management to expand their interests. The limitations of this type of work were well illustrated by one of these nurses whose business-like dispatch enabled her to handle quickly and efficiently the large number of cases passing through the dispensary, but whose lack of interest and coldness repelled any further advances on the part of the girl employes in illness or trouble.

In contrast to this nurse was an older woman, also of the dispensary type and less well equipped technically, but of warm human sympathies who had gained the confidence of a large body of workmen in another plant through the contacts made in the first aid room.

An extreme instance of failure to connect first aid work with prevention of injuries was observed in another plant where a man was treated three times in one day by a nurse for cutting his hand at the same machine. Here

nurse was not allowed to leave the dispensary. She was regarded by management, and had learned to regard herself, as a permanent fixture of the first aid room, a mere mechanical agent for binding up cuts or lacerations.

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work as absorption in surgical routine. In one establishment the nurse devoted two evenings a week to social meetings, while failing to note obvious health hazards in certain rooms and making no effort to educate the girls by talks on health either individually or in groups.

The transfer of workers from jobs for which they are physically unfit to other positions better suited to their physiques is a genuine health measure which nurses may well recommend to the management. Such transfers had been successfully recommended by nurses in Cleveland for various cases of flat-foot and varicose veins. Some girls affected by a necessarily cold work-room and others who were suffering from dermatitis had been benefited by a change. These isolated examples show how great an influence the nurse may have in prevention of the illness before it becomes acute, if she is personally familiar with the workers and on terms of confidence with them.

Education in hygienic habits is also clearly one of the nurse's first duties, as yet little developed. One nurse had recently regained a valuable girl worker and had lessened her susceptibility to constant colds, by persuading her to give up chiffon waists in winter-time and to dress more warmly. Another nurse encouraged hygienic habits in a good factory by making daily inspections, providing clean caps and aprons and urging personal cleanliness. In one room unaffected by the artificial ventilation, she had arranged to have the windows opened ten minutes, morning and afternoon.

Another example of good preventive work, along a somewhat different line, was the nurse's successful insistence upon installation of a sterilizer in the lunch-room of a plant in which employes known to be suffering from tuberculosis and venereal disease were in contact with the other workers.

SOME CAUSES OF FAILURE

Too often, however, instead of trying to teach hygienic habits the nurse relies merely upon giving drugs. Contrary to all good medical and nursing practice, nurses were found habitually giving sedatives and medication for many minor ailments. This widespread practice should be abandoned at once.

Another serious fault in industrial nursing in Cleveland, which it shares with industrial medical practice, is the lack of records and statistics. In many cases neither the management nor the industrial physician encourages or indeed takes any interest in the nurse's reports. Yet without reports and records, the nurse cannot gauge her own progress or be in a position to prove her points to her superiors. A simple and effective system of records, adapted as necessary to the conditions of individual plants, and showing so far as possible the relation of nursing care to such matters as compensation claims, statistics of accidents, illness and absence of employes, is one of the most urgent needs of industrial nursing in Cleveland. Provision of lay assistants in record keeping as well as in the dispensary is greatly needed and would release the nurse for her more important duties.

Lay assistants are desirable also for all routine following up of absentees. In all cases of illness, too little emphasis on home visiting was found in Cleveland. This lack is unfortunate since a knowledge of home conditions and

good contacts in the home are of first importance in obtaining the genuine confidence of the workers. The services of the Visiting Nurse Association of Cleveland should be called on for bedside care if necessary, after perhaps one or two visits by the industrial nurse.

The isolation of the industrial nurse keeps her from contact with the rapid developments of public health nursing and of industrial hygiene, with which she should be acquainted and in which she should share. Few industrial nurses have had adequate training for their special field, most have at best learned through their own experiences and their native abilities. In cities in which industrial nurses are a part of some agency, such as the Visiting Nurse Association, they, like the rest of the staff, benefit from belonging to such an organization and sharing its general standards and practices.

The Nursing Survey has recommended the inclusion on the Central Nursing Committee of a representative of industrial nursing. The Industrial Nurses' Club might be of much more technical professional value to nurses than it has been in the past, and either it, or some similar organization, should be actively organized. It should be a real center for developing this most recent, and one of the most important, branches of public health nursing as it is capable of being developed in industry.

A discussion of Industrial Nursing also appears in the chapter on Industrial Medical Service, Part VII.

Some Notes on Private Duty Nursing

UNNECESSARY EMPLOYMENT OF FULL-TIME GRADUATE NURSES

IT is often asserted both by physicians and by trained nurses that in many cases of minor illness or of convalescence, the services of a graduate nurse are unnecessary and that such cases can be adequately cared for by less highly trained persons, or indeed by members of the family.

With the object of obtaining some more concrete information as to such possible substitution, a brief inquiry was addressed to a small group of private duty nurses in Cleveland. The number of cases reported on is too small to be at all conclusive, but the replies received are suggestive and indicate that a wider investigation might yield valuable conclusions.

Inquiries were addressed to 25 nurses. They were asked whether, during the past year, any of their patients could have dispensed with the care of a full-time graduate nurse, either altogether or for part of the time. Replies were received from 15 nurses. They were also asked which if any of the following substitutes could have replaced the graduate nurses, viz: a so-called "practical" nurse, members of the patient's family or an "hourly" nurse, that is, a graduate nurse engaged for an hour or two per day.

USE OF HOURLY NURSE RECOMMENDED

Of 275 cases nursed during the period reported on, 68 or a quarter (24.7%) might, in the opinion of the nurses, have done without their services for all or part of the illness.

The outstanding fact which emerges from this brief inquiry is the agreement among the nurses that of the 46 patients who could have dispensed with their services for part of the time, 34 or almost three-quarters (73.9%) could have been cared for by hourly nurses. This estimate is no doubt in part due to the large number of acute surgical cases represented in the total group. For in such cases expert continuous nursing may obviously be needed for only a short time, after which an hour or two per day might readily suffice for the necessary daily nursing care.

NATURE OF CASES

Of the total number of cases reported, about three out of five were hospital cases, and of these almost all were surgical. The remaining two-fifths, mainly medical cases, were nursed at their homes. Only about one in nine of the home patients was surgical.

Acute cases reported upon far outnumbered chronic cases, both at home and at the hospitals. The proportion of acute to chronic cases at home was 95 to 9, and in hospitals it was 159 to 12.

Two of the nurses stated that they did not take any except acute cases. The inclusion of the reports of these nurses makes the proportion of cases which could have been cared for without graduate nursing care less than it would ordinarily be.

NUMBER OF NURSES REPORTING UNNECESSARY EMPLOYMENT

Thirteen out of the fifteen nurses reported that they had been unnecessarily employed at some time during the period reported on. (For various

personal reasons the period reported on varied from four to seventeen months, the average being somewhat over ten). The two nurses not having had such cases were among the four reporting on a very short period, viz: from four to six months only.

AMOUNT OF UNNECESSARY EMPLOYMENT

As has been stated, in 68 of the 275 cases reported on, the graduate full-time nurse might have been otherwise replaced. Omitting one nurse whose service consisted of an exceptionally rapid succession of acute cases, the total number of cases of unnecessary employment amounted to 67 out of 226, or 29.6%, which is more nearly representative of the group. In individual reports the percentage of cases of unnecessary employment varies greatly, ranging from 72.7% of all cases cared for by a nurse in the period in question, down to 2% of all cases, the median being 44.4%. In other words, one nurse had 11 such cases out of 20 cases in all; another had 8 out of 11; the lowest proportion being 1 out of 49.

Similarly, the length of time spent in unnecessary employment by the 15 nurses varied greatly. No definite statement can be made on this point, as information was sometimes lacking and sometimes uncertain. One nurse reported as much as three months' unnecessary nursing in a year's experience, or 25% of her total time; another 4 months out of 11½ months or 34.8%. The average length of time so spent for 10 nurses who were able to give an estimate, amounted to something over 1½ months per nurse per annum.

POSSIBLE SUBSTITUTES FOR FULL-TIME GRADUATE NURSE

Of the sixty-eight cases on which these graduate nurses reported unnecessary employment, about one-third could have been cared for by some other arrangement during their entire illness. In fourteen of these cases a practical nurse, in seven cases a member of the family, and in one case an hourly nurse, would have sufficed.

The remaining two-thirds (46) could have dispensed with the full-time graduate nurse's services during a part of their illness only. As has already been stated, in thirty-four cases, she could have been replaced by hourly nursing. In seven, it is believed that a practical nurse would have sufficed, and a member of the family in the remaining five cases.

Thus, in the opinion of the 15 nurses consulted, the cases cared for during the given period were divided as follows:

- (a) A large proportion of cases in which hourly nurses could have relieved the full-time nurses after the most serious stage was passed, and one case which could have been entirely cared for in this way.
- (b) A considerable proportion of cases which could have used a practical nurse during the entire sickness, and a few in which such nursing could have been utilized for part of the duration of the case only.
- (c) A few patients who could have been nursed during their entire illness and a few during part of their illness by members of their own families.

EMPLOYMENT OF TRAINED ATTENDANTS

In Cleveland as elsewhere the employment of trained attendants has been a subject of controversy. On the one hand there is undoubted need

of persons capable of rendering personal service and some small degree of nursing care to those who are ill but who do not need the services of a graduate nurse. The present shortage of nurses for bedside care emphasizes the desirability of making available the services of such a class of workers, in order to release the graduate nurses for duties which they alone can compass.

Our brief inquiry into possible substitutes for the full-time graduate nurse shows that in the opinion of these private duty nurses themselves, a part of their cases might have been carried by attendants or "practical" nurses as well as by "hourly" nurses.

The Nursing Survey recognizes the value and need of the trained attendant. It has been urged to formulate an educational plan and short courses for the training of such workers. But to this plan there appear to be at present several valid objections. For it must be recognized that the employment of the trained attendant brings with it unmistakable dangers, especially when, unequipped, she assumes the part of the fully trained nurse. Against this danger the patient must in some way be protected.

The experience of the Visiting Nurse Association of Cleveland, in discontinuing its attendant service after almost three years' trial, appears so far as it went, to have been conclusive. The failure was due to causes operative elsewhere as well as in Cleveland, that is to the difficulties of retaining control of the work and the charges of the attendants, while responsible for their employment.

That the pay of trained attendants can be very much lower than that of the graduate nurses, it is probably unreasonable to expect, since their cost of living is not materially less than that of the graduate nurses. That there is a genuine demand for the trained attendant in her own sphere, the experience of the Visiting Nurse Association has amply demonstrated anew.

The question at once arises whether safeguards cannot be devised to retain the benefits and minimize the dangers of such a service. From experience in other lines of work it would appear that no better safeguard has been devised than through legislation defining the status of, and licensing, both graduate nurses and those trained to give services of a different but no less necessary order.

A precedent for such legislation already exists in many states but not yet in Ohio, in the laws licensing the practice of dental hygienists (Connecticut, New York, Massachusetts) that is, of persons authorized to practise dental cleansing without use of instruments and only under the supervision of a licensed dentist. Here there has been established successfully the licensing of two different grades of workers, for different grades of service in the same profession. Penalties for fraud, or for practising under any but the appropriate name, should obviously be provided for in such legislation.

At the present time, and until the necessary regulation by city or state ordinance, has been enacted, it does not appear desirable to recommend the establishment of courses for further training of attendants in Cleveland. The framing and enactment of suitable legislation should take first place, in plans for action in this matter.

THE CLEVELAND HOSPITAL AND HEALTH SURVEY REPORT

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Hospitals and Dispensaries

PART TEN

**Cleveland Hospital and
Health Survey**

Hospitals and Dispensaries

PART TEN

Cleveland Hospital and
Health Survey

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Preface

The Hospital and Health Survey of Cleveland was made at the request of the Cleveland Hospital Council.

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The report as a whole, or by sections, can be obtained from the Cleveland Hospital Council. A list of the parts will be found in the back of this volume, together with prices.

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ly physician, because she is "afraid of hospitals." A member of a organization utilizes the services of the official doctor of the organization during a minor illness, but when he thinks something serious is the matter with him, calls a "real doctor," meaning one whom he pays. Quacks' offices are crowded with thousands of credulous victims, and the mails are filled with letters directed toward the coffers of patent medicine vendors. Choices among the resources available for the care of sickness are as varied as the circumstances surrounding each case, and as manifold as human nature.

A health survey of Cleveland might theoretically arrange the ten resources for the care of illness in the order of their relative efficiency, and then study, among different sections of the population, their usual order of utilization for different kinds of sickness or accident. Such a study cannot practically be made, but supposing for the sake of argument that it could be made, let us ask this question: would the order of utilization by the people of the ten resources for the care of illness correspond to their order of relative efficiency? So far as it does not, the well-being of the community suffers. Reputable physicians and the hospitals and dispensaries in which these physicians render service, obviously constitute the primary and fundamental medical resources for the care of illness and the promotion of health. Are they used to the degree of fullness and of discrimination with which they should be? If not, why not? The answer would not be the same for all groups of the population.

A study of the hospitals and dispensaries of Cleveland cannot rightly be limited to the amount and the nature of the work done, the internal administration, and other technical problems, important as these are. It needs also to include a study of the attitude of different sections of the people—the medical profession, the well-to-do, the poor, the foreign-born, etc., toward these institutions. It is on the basis of these attitudes, understandings or misunderstandings, that the choice among medical resources is made in time of sickness or accident, and upon which the utilization of hospital and dispensary for the benefit of the public ultimately rests. Financial support of hospitals and dispensaries by the community depends precisely on the same considerations. In this section of the report of the Cleveland Hospital and Health Survey, therefore, an endeavor will be made to review the details of the work of the hospitals and dispensaries of the city, in their medical, administrative and financial aspects, and to consider also the relation of these institutions to the various sections of the public which use them or need them. Hospitals and dispensaries represent or ought to represent an organization of medical services upon a scientific basis, bringing to bear on the needs of the individual patient the maximum resources in equipment and skill that twentieth century medical science can muster. To promote a better understanding of hospitals and dispensaries by the community is to promote at the same time their better and more discriminating utilization, and their more effective and generous support.

We need to approach the study of the hospitals and dispensaries of a great city from the standpoint of the community rather than of the institution; to see them as the average citizen and the average family sees them, rather than as the physician or the specialist in hospital administration. Laying aside for the moment the demands which the average family may make on hospitals and dispensaries for the promotion of health, a real though slowly growing part of their function, the primary reason for the utilization of hospitals and dispensaries is the occurrence of sickness or accident. Whenever illness or accident comes, the individual or the family must reach a decision as to what is to be done. Choice must be made among possible resources. It is well to list these resources so that all of the elements of the picture shall be in mind. A list of ten resources for the care of illness might be included:

1. The home remedy,
2. The advice of friend, grandmother, or neighbor of reputed wisdom,
3. The private physician,
4. The drug store,
5. The physician of an organization of which the patient or family is a member (for instance, lodge doctor, industrial physician, city physician),
6. The quack doctor or medical institute,
7. The midwife (for obstetrical care),
8. The nurse,
9. The hospital,
10. The dispensary.

The attitude of a community towards its hospitals and dispensaries is made up of the points of view of its individual citizens. These points of view are practically expressed in determining what choice is made among the resources for the care of sickness. Such choice or decisions are influenced by considerations of finances, but also by custom, personal connections, prejudices and information or misinformation regarding the availability, powers and prestige of the various resources for the care of a given case of illness or accident.

It is obvious that the ten resources for the care of illness vary in their grade of efficiency. It is obvious that the various elements in the population select resources differently. Thus the use of the midwife is largely confined to foreigners; the quack reaps his richest harvest from among the less educated; the service of the dispensary at the present time is chiefly for those of limited means. One man with a pain in his back goes to a dispensary. Another equally unblessed with this world's goods hies himself to a drug store and purchases and applies a widely advertised "Rheumatic's Ready Relief." One woman goes to a hospital for an operation; her neighbor two blocks away refuses to go to an institution even on the advice of her

family physician, because she is "afraid of hospitals." A member of a lodge utilizes the services of the official doctor of the organization during a minor illness, but when he thinks something serious is the matter with him, he calls a "real doctor," meaning one whom he pays. Quacks' offices are thronged with thousands of credulous victims, and the mails are filled with money directed toward the coffers of patent medicine vendors. Choices among the resources available for the care of sickness are as varied as the circumstances surrounding each case, and as manifold as human nature itself.

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SOME DEFINITIONS

The hospital and the dispensary, taken together, comprise what may be called the organized or institutional practice of medicine. In the private practice of a physician, some patients are seen in his office, others in bed in their own homes or in a private room of an institution. In the institutional practice of medicine the dispensary patients correspond to those who are seen in the physician's office, and the hospital patients to those whom he sees in bed.

During the winter of 1919 and spring of 1920, when the Survey was made, there were 47 institutions known as hospitals, and 26 dispensaries and health centers in Cleveland and Lakewood. Under a law of Ohio which became effective in 1919, all hospitals and dispensaries must be registered with the State Department of Health and render to it an annual report. Eight of the above 47 "hospitals" had not registered with the State Department of Health at the time the field work of the Survey was completed (June, 1920). Their names were found in the telephone directory. They are not further referred to in this report, except in relation to the public supervision of hospitals, in the section on "Organization to Carry Out Plans." The definition of dispensary as thus far interpreted by the State Department of Health does not appear to include the Health Centers or clinics doing primarily preventive work.

The medical institutions of Cleveland may be further divided according as they are members of the Cleveland Hospital Council or not. Table I. in the Appendix gives the hospitals and dispensaries of Cleveland, stating after each the approximate number of beds in the hospital, and the approximate number of annual visits by patients to the dispensary.

On the accompanying map these institutions are shown in their proper location.

It is important to state certain definitions and distinctions which will be of service in understanding the problems and relations of the hospitals and dispensaries of Cleveland.

Hospitals may be broadly classified in two ways: first, according to the character of diseases treated, and, second, according to the relation of the institution to the community.

With regard to the character of diseases treated, the distinction is between general hospitals, such as City or Lakeside Hospitals, and special hospitals, such as Cleveland Maternity or St. Ann's Maternity Hospital. The latter receive only patients of a designated medical type. It will be observed at once that Cleveland has few of the second group.

On the other basis of classifying hospitals in their relation to the community, two divisions may be made:

- (a) Public-service hospitals.
- (b) Proprietary hospitals.

1. The public ought to understand the difference between the "medical boarding house" and the hospital.

In every large city are found institutions, usually of the proprietary class, which have an operating room, a nursing service, and which receive the patients of private physicians, put them to bed, nurse and feed them, and provide for nursing attendance at operation if the case is surgical. The private physician carries the same individual responsibility that he would if the patient were in bed at home. The difference is merely that there are facilities for a major operation close by, and that the patient's household is freed of the difficulties of adjustment to illness, the introduction of a trained nurse, provision for a special diet, etc. These are to all intents and purposes medical boarding houses.

The modern hospital is as different from a medical boarding house as a passenger liner is from a tramp steamer. Both float and both will take one anywhere. But one is just a boat, while the other is a boat plus an organization.

The modern hospital provides the physician with certain facilities which are unavailable in the patient's home. Medical practice today requires more than the physician's individual trained senses. Laboratories for many tests and an X-Ray department are necessary adjuncts to modern medical practice. The patient cared for at home can secure these benefits only through expensive and somewhat slow recourse to private laboratories. In the hospital, this equipment and a vast variety of other instruments and apparatus are brought together under a single roof, and organized under a single control, so as to be most economically and effectively used. Modern medicine also is highly specialized. No one physician can master all the science. Many cases require examination and study by physicians each representing a different branch of medicine, in order that all the necessary facts be obtained, and through consultation an accurate diagnosis of the case be established. The staff of a modern hospital provides a group of specialists working with joint equipment, and under a mutually acceptable plan of team work, which should render the service of each of maximum value to the others as well as to himself and to the patient.

Similarly the modern hospital provides assistants to the physician of special skill; the medical assistant, the interne; the laboratory assistant, technician; the nurse, and the social worker. Through the aid of these assistants the highly special skill of the physician is kept for just that kind of work which requires it, and his time is not spent on routine or details. Consequently with a given expenditure of time and energy he can render service to a much larger number of patients, and more effective service than that.

A modern hospital may be defined as an institution in which there is efficient use of medical equipment and cooperative organization of medical staff for the diagnosis, treatment and prevention of disease.

A critical study of hospitals makes it clear that some institutions maintain the principles of the medical boarding house with respect to their private

The first class receive patients as a public service, whether pay, part-pay or free patients. The second class are conducted as corporations for the profit of their owners. It is important to notice that the term "private hospital," which is not infrequently used, is decidedly ambiguous. The word "private" is sometimes employed to indicate a hospital supported by private funds as distinguished from a state or a municipal hospital. In another sense, a private hospital is taken to mean one which receives only private patients of certain physicians and no ward or "staff" patients. In still a third sense, the word "private" is applied to a hospital which is conducted as a private business for profit. To use the same word "private" for a hospital which is performing a great amount of public service rendered alike to those who pay and those who do not pay, as for an institution which is run as a business enterprise, involves dangerous confusion. The term "proprietary" makes the proper distinction.

This term, however, is not necessarily one of reproach. It is perfectly legitimate and proper for an individual or a corporation to maintain a hospital for profit, as a business enterprise. Such an institution corresponds to a "private school" or "academy," and may be as well conducted and as useful to a limited circle of patients as are many well known private schools to their clientele.

As will appear later, a number of institutions in the above list fall within the proprietary class. There are some of these hospitals which were incorporated as business organizations to be run for profit, but which in practice are conducted as public service institutions, and have been so recognized by the Cleveland Hospital Council. According to the principles which will be laid down in this report, the extent to which the public should assist financially in the maintenance of a hospital should vary in precise degree with the amount and proportion of public service rendered by the institution. To be able to measure this accurately and to make the results of this measurement known to the public or to the agency representing the public, such as the Community Fund, is one of the important aims which those interested in hospitals must have in view.

The degree of public service rendered by a hospital does not correspond with the number of its free patients. Some persons have the notion that doing charity means giving something for nothing. The twentieth century idea of charity is a service, not a dole. The public service rendered by a hospital should be measured from a financial standpoint by the amount of care given at a rate lower than the cost of the service. This in practice means measured by the number of days of care rendered during the course of a year. If a patient is treated for a day and pays only half the cost of the service, the hospital may be credited with one-half of a day's free care. Such is a simple method of estimating the financial aspect of the public service of a hospital.

From the professional standpoint, public service must be estimated in terms of kind and standard of care, a more technical and difficult matter to evaluate. Classification of hospitals according to the quality of service, an invidious task, can be undertaken here only with reference to one distinc-

on. The public ought to understand the difference between the "medical boarding house" and the hospital.

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patients, while having a well organized system for modern hospital work with respect to their ward cases. Is privacy a substitute for service?

The distinction between the two types of services will be illustrated in numerous points during the course of this report, and will be of importance in connection with certain final conclusions. Each hospital trustee and every hospital patient will do well to see how these principles work out with regard to the hospital which he knows best.

The dispensaries may be classified as are the hospitals. As a matter of fact, the list of dispensaries on pages 984-986 contains none of the proprietary class. There are indeed some clinics maintained in Cleveland by individual physicians, whether on their own account or in connection with industrial establishments. Some of these are reputable enterprises; some of them are merely quack medical institutes. The latter class will be referred to only in connection with some general recommendations of the Survey in the section on "Organization to Carry Out Plans," as are the hospitals not registered with the State Department of Health.

Cleveland has only one dispensary treating the sick of the class confined to special diseases—the Babies' Dispensary. Its clientele is limited to children not over three years. A highly important group of special dispensaries, however, are the public health dispensaries, which aim to prevent rather than treat disease, to educate rather than to cure—the Health Centers, Baby Prophylactic Stations, and Prenatal Clinics. Broadly speaking, a line for the support of dispensary work is drawn by the municipal authorities on the border line between preventive and curative medicine; private support of dispensary work being largely though not wholly confined to the dispensaries treating the sick, and public support being almost entirely confined to the dispensaries whose work is primarily preventive and educational.

The term "dispensary" originally meant a place where medicine was given out or dispensed to the poor on the prescription of a physician, and the word has persisted, although at the present day the giving out of medicine is a minor function of a dispensary. Medical diagnosis, advice, and treatment other than medicine are the services of primary significance. The term "out-patient department" is frequently used as synonymous with dispensary when applied to a dispensary which is part of the organization of a hospital—the bed cases being the in-patient department and the dispensary the out-patient department. In this report, the term dispensary will be generally used except when it is desired to draw a special distinction between the "in" and the "out" patients.

The unit for measurement of the services rendered by hospitals and dispensaries is important to define. Hospital service is measured in days of care. A patient who has been in the hospital for two weeks has in this sense received fourteen units of service. The unit for measuring dispensary service is the visit paid by the patient to the clinic. It will be observed that the visits paid by patients to a dispensary in the course of a month or of a year is much more than the number of individuals treated, just as the number of days' care given patients in a hospital is much larger than the number of

erent patients. In actually studying the work of a given institution or the city as a whole, we are of course interested in the number of individuals treated for as well as in the bulk of service rendered. Days of hospital care and visits to dispensary clinics represent the latter element—bulk of work done. The number of individuals treated is in practice a more difficult figure to obtain, because of the likelihood of the same individual, in case of admission to dispensary or hospital, being counted as a different patient.

One of the fundamental problems of every professional institution today is how to make a specialized and technical piece of work clear to the average person. The problem is to interpret hospitals and dispensaries to the community. This means stating facts showing the kind, amount and quality of service rendered, and stating them in such a way that they are easily understood by the average person. It is of relatively little importance to state facts a temporary survey gathers and reports—such facts are at most only a cross-section, a momentary picture. It is of very great importance to state facts the hospitals and dispensaries gather and present regularly to the public, and how they present them to the unprofessional mind—whether in a vivid and convincing fashion or in dry and technical form. What a board of trustees needs to know about their own hospital or dispensary; what the contributors to the Community Fund need to know about all hospitals and dispensaries; what the general public needs to know about hospitals as a whole or about its municipal institution in particular—these are of fundamental importance for the Survey to suggest.

The cost of maintaining medical institutions has been increasing with great rapidity, not only because of the general rise in prices, but because of advance in medical science, the more elaborate equipment that is necessary, higher specialization in many branches—in a word, higher standards of service, yielding better results for the cure and prevention of disease. Public apprehension of these new and higher standards has lagged behind their establishment in the strongest institutions. Such comprehension forms the basis on which taxes for municipal institutions must be levied and campaigns for community chests or for building funds successfully accomplished. Adequate moral and financial support of hospitals and dispensaries depends on making these standards and needs clear in terms of human interest and popular understanding. The defining of units, the assembling of statistics and the compilation of professional reports are fundamental prerequisites. The statement and interpretation of these data to the community is a necessary sequence.

II. Hospitals

HOSPITAL PROVISIONS AND COMMUNITY NEEDS

Reserving the study of dispensaries for Chapter III., we may now compare the hospital facilities of Cleveland with those of other communities and with the probable needs of the city.

During the winter of 1920, while the Survey was in progress, the number of hospital beds in the cities of Cleveland and Lakewood was 3,378, including all the institutions registered with the State Department of Health.

Of these, 3,088 beds were in the 20 hospitals of the Cleveland Hospital Council, as follows:

	Beds
Cleveland City Hospital.....	785
Cleveland Maternity Hospital.....	60
Fairview Park Hospital.....	85
Glenville Hospital.....	74
Grace Hospital.....	35
Huron Road Hospital.....	84
Lakeside Hospital.....	289
Lakewood Hospital.....	53
Lutheran Hospital.....	50
Mount Sinai Hospital.....	225
Provident Hospital.....	29
Rainbow Hospital.....	85
St. Alexis Hospital.....	250
St. Ann's Maternity Hospital.....	55
St. Clair Hospital.....	43
St. John's Hospital.....	150
St. Luke's Hospital.....	139
St. Vincent's Charity Hospital.....	290
Warrensville Tuberculosis Sanatorium.....	270
Woman's Hospital.....	37
	—
Total	3,088

on-council hospitals included 290 beds, as follows:

	Beds
id Emergency Hospital.....	22
id Home Hospital.....	10
leveland Hospital.....	31
ty-fifth Street Hospital.....	60
enty-ninth Street Hospital.....	22
: Crittenden Home.....	12
Private Hospital.....	9
tchcock's Private Hospital.....	15
k's Hospital.....	45
n Army Rescue Home.....	54
s Hospital.....	10
otal.....	290

assification it is to be noted that in conformity with the usual
s (1) for the insane and feeble-minded, (2) for the infirm and
orphanages, and (4) under the control of the United States
, have not been included. The list includes hospitals for general
ases of an acute or chronic nature, and convalescents, but not
ses mentioned above. This point is important in making com-
n other communities.

beds are compared with the population of the cities of Cleveland
od, taken together, we should find that there are 3,378 beds to
of approximately 840,000 in these two cities. However, these
ving more than the population of Cleveland and Lakewood.
ed by what may be called the metropolitan district, and even
: areas depend upon them. We may form a definite estimate
ollected by the Survey on the two days, December 3, 1919, and
1920, on each of which was taken a census of the patients in the
itals and in three others. A tabulation of the patients in these
these two days by location of residence(the average of the two
d that of the 2,651 patients 14.7 per cent., or practically one-
ie from outside the city of Cleveland. This number includes of
coming from Lakewood, but it is certain that at least one-eighth
its who were in the hospitals on these two days came from out-
id or Lakewood. At least one-eighth therefore should be added
ation served by the hospitals on our list, which would make a
t 945,000. Dividing this by the number of beds, 3,378, we find
provision to the extent of about 2.8 beds to one thousand of
This is a fundamental figure, because it is an index of the de-
ision of hospital service for community needs. Its significance
lucidation.

Comparisons must needs be made with other communities. In the 1919 report of the United Hospital Fund of New York City, a classified list is given of the hospitals in that metropolis. There is shown a total of 28,208 beds, which does not include the four classes of institutions mentioned above, or many small private institutions such as appear in the Cleveland list among the non-council hospitals. The proportion of patients coming from outside the limits of Greater New York is not known, but most of the suburbs of New York are better provided with hospitals than the outlying districts of Cleveland. It is assumed that the omissions from the list of hospitals in New York given by the United Hospital Fund would probably balance in number the beds required to serve non-residents. On this basis, provision of hospital beds in the metropolis in proportion to population is five per thousand.

Boston provides another basis of comparison. The legal city of Boston is a little smaller than Cleveland, according to the 1920 census, 727,000 against 796,836, but Boston is one of some 38 towns and cities within the metropolitan district, with a total population of approximately 1,500,000. A list of hospitals in this "Greater Boston" showed, from figures in the Medical Directory of 1918, 140 hospitals, general and special (excluding those types above named) with a total of 7,247 beds. This is 4.83 beds to 1,000 of population.

Taking the city of Boston alone, with a census population in 1920 of 727,000, it was found that there were 108 hospitals, with 6,062 beds. This is an average of 8.3 beds to 1,000 population, but this figure should not be used for comparative purposes, since so large a proportion of the Boston beds are used by the metropolitan district, with double the population of Boston proper. For purposes of comparison with Cleveland, the figure for the metropolitan area should be taken. It will be observed that the figures for New York and for "Greater Boston" are almost exactly the same.

It is apparent that Cleveland falls far below either Boston or New York in providing hospital service in proportion to its population. On the basis of five beds per thousand Greater Cleveland needs fully 4,725 beds, or at least 1,350 more than now exist. In view of the fact that even when new beds are planned for, time is required to build and equip the hospitals to contain them and that population needs continue to grow, it may be conservatively estimated that Cleveland needs to add 1,500 beds to its hospital capacity as quickly as possible. Even at the present moment (June, 1920) it must be recalled that while the 1920 census showed a smaller population for Cleveland than had been anticipated, yet the growth of the suburbs, which must depend largely upon the main city for their hospital service, has been proceeding at such a rapid rate that it is fair to estimate that not less than 1,500 rather than 1,300 beds should be stated as the shortage in the year 1920.

Were this merely a conclusion derived from statistics, it would be indeed questionable. The statistics, however, are worked out merely to give an index to well-established facts showing the shortage of hospital beds in Cleveland and the unfortunate results of this shortage. To depict these

ill require a closer analysis of the service offered by the hospitals of the ty.

The hospitals of Cleveland are predominantly devoted to surgery. On ie two Survey census days, if the hospitals of the city were taken together omitting City Hospital, Warrensville Tuberculosis Sanatorium, and Rainbow (ospital), it was found that 48 per cent. of the patients were surgical, and that in the majority of the hospitals the ratio was much higher. The ason that City Hospital is excluded is because in its 785 beds are included rge groups of cases such as tuberculous, alcoholic, venereal disease and ntagious disease patients, which do not appear in any other hospital. On ie census days, only 21.5 per cent. of the patients represented general medi- ne, and only 9.4 per cent. special services. 18.7 per cent. were obstetrical, and 2.4 per cent. not stated. The figures themselves are given in a footnote.*

Cleveland is seriously deficient in provision for special classes of cases.† bstetrical cases are found in the majority of the hospitals. The average or the two census days was 313, or about one patient in ten, 9.3 per cent. of ie total patients in the Cleveland hospitals on those days. Provision for bstetrical cases in special hospitals is made only at Cleveland Maternity ospital and at St. Ann's Maternity Hospital, a total of 115 beds. Recent ears have seen a great increase in the demand for care in hospitals at the me of confinement, particularly by middle-class families, but these cases have ad in the main to be provided for in the general hospitals, without the de- velopment of special hospitals, special services, or special wards to meet the rticular need.

Regarding cases of eye disease, it was found that only one hospital, akeside, makes any special reservation of beds, four beds being held in the ale surgical ward of Lakeside for this service. There is no special ward in ie city for ear, nose and throat cases. In New York 608 beds are provided a special institutions for eye, ear, nose, and throat cases, aside from such rovision as is made in the general hospitals. In Boston, 219 beds are pro- ided; in Baltimore, 153; in Philadelphia, 58; in Chicago, 32.

In special provision for children, Cleveland is similarly lacking.

Pediatric services exist at Lakeside, City and Mount Sinai, and beds are set aside for children in the following additional hospitals: Children's Fresh Air Camp, Fairview Park Hospital, Huron Road Hospital, Lakewood Hospital, Rainbow Hospital, St. Alexis Hospital, St. Ann's Hospital, St. John's Hos- pital, and St. Luke's Hospital, making a total of 302 beds designated as chil- dren's beds, for other than contagious or convalescent cases.

**Classification of Patients, Census Days (averaged)*

Type of Service	Number	Percentage
Medical.....	361.0	21.5
Surgical.....	805.5	48.0
Obstetrical.....	312.5	18.7
Special.....	157.5	9.4
Not stated.....	40.0	2.4

†In 1918 Boston had beds in special institutions to the number of 2698, as follows:

Tuberculosis.....	792	Children.....	240
Eye and ear.....	225	Women (maternity).....	436
Contagious.....	340	Women and children together.....	542
Cancer.....	25	Convalescent.....	98

It will be observed that these are all parts of general hospitals. As compared with this, New York has 1,298 beds for children in special hospitals, and in addition, at least as many more beds specially set aside for children in a number of general hospitals; Boston has about 240 beds for children in special hospitals and more than that in pediatric divisions of a number of general hospitals.

On the two census days, there were 496 children found in the Cleveland hospitals, of whom 57 were in the contagious disease service of City Hospital. The vast majority of the remaining 439 were scattered through the wards and rooms of general hospitals, the greater number being surgical cases.

In the matter of provision for contagious cases, Cleveland has 100 beds at City Hospital. Boston has 340 beds in its City Hospital. In connection with contagious diseases, these figures are comparable, since both institutions rarely take cases except from within the limits of the legal city. It is stated by such a national authority as Dr. Charles V. Chapin that for the common contagious diseases (excluding tuberculosis, venereal diseases, etc.), a community should provide at least one bed for every 2,000 of population. This in Cleveland would mean almost 400 beds. Boston it will be observed has measured up to Doctor Chapin's estimate; New York, with 2,100 beds for contagious cases, almost meets it.

A special report of the Survey dealing with tuberculosis (Part IV.) has shown that Cleveland has not enough beds for this disease.

The estimates of the specialists in venereal disease are to the effect that at least 200 beds should be provided in the City Hospital, and that a certain amount of provision should be made in general hospitals. (See Part V.)

In the orthopedic service, a branch of medicine of rapidly increasing importance, Cleveland has an insignificant provision. The number of reported orthopedic cases in hospital beds, at the time of the Survey, was not known, except at Rainbow Hospital, which is chiefly designed for convalescent orthopedic cases of children. Boston has about three times the provision for orthopedic cases as has Cleveland, and New York has over 360 beds in special hospitals alone for acute cases of this type.

These facts go to show where the deficiencies in provision of hospital beds in Cleveland lie. The reason for the shortage of beds is obviously that the population has grown more rapidly than has recognition of needs for more hospital service. We find in the Cleveland hospitals the more urgent surgical and some medical cases being treated, but very little development of services for special cases. In general it may be said that the urgent diseases or emergent cases, particularly surgical, which force themselves on the community's attention and upon the attention of the individual hospitals, and which cannot be denied admission, have left little room for other types of work.

The effect of this shortage of 1,500 beds cannot be measured. We can only estimate the number of sick persons who have had to be cared for in their homes with inadequate facilities for diagnosis, for nursing, for diet, and for

are of all kinds. The number of cases of disease needing the services of a specialist, the complete and thorough observation necessary to make a diagnosis, such as is only possible under hospital conditions, we can only infer. We can only in imagination picture the suffering that has resulted, the development of slight illness into serious, the diminution of productive power, the loss of opportunity to prevent as well as to cure disease. Such shortage of hospital beds can only mean a waste of the vital resources of the population.

Against these figures ought to be set others which suggest an almost contradictory picture. If there were a shortage of beds, it might seem at first sight that the 3,400 beds now available should be constantly filled to their capacity. Such, however, is not the case. On the first census day, December 3, 1919, 2,581 hospital patients were reported as in hospitals with a theoretical capacity at the time of 2,831 beds. On the second census day, January 15, 1920, 2,663 patients were reported in hospitals having 3,001 beds. The percentage of beds filled on the census days for this group of hospitals, was 95.7 and 88.7, respectively.

A similar comparison can be made on the basis of an entire year, by taking the number of beds in the hospital and multiplying this number by 365, thus securing the maximum days of care that might be given during the year, comparison of the actual number of days' care, as reported, with this figure gives the proportion of utilization of hospital facilities for the year. For the group of seventeen hospitals for which figures were obtained for the year 1918, a total of 929,825 days of care was possible but only 686,967 days of care were given, or 73.9 per cent. During the year 1919, for a group of sixteen hospitals, a total of 930,465 days of care was possible, but only 645,280 days of care were given or 69.3 per cent.

It should be stated at once that we cannot expect a hospital or group of hospitals to have all beds filled all the time. There are periods of epidemics, and in normal times there are occasional days when a hospital may have every bed taken, but such conditions are exceptional. A hospital may refuse cases when it has vacant beds, because there must be classification of patients to a greater or less degree, and the ward for which the patient is suited on account of his sex or disease may be full, while there may be vacancies elsewhere. Inability to receive a given patient is thus compatible with some vacancies in the same hospital. Over any considerable period of time during the year, there are many reasons why a certain number of beds cannot be completely utilized. Rooms and wards must be renovated and occasionally repairs are necessary. In many hospitals a certain number of beds are set aside for the temporary detention of patients, particularly children, during a period of observation so as to eliminate risk of contagious disease.

Such are some of the reasons why hospitals never show the use of their beds during the year up to anything like 100 per cent. of capacity. An annual average of 75 per cent. is a very fair showing. During the winter and spring months there is generally greater demand for hospital service

than during the summer and the autumn, and consequently a higher ratio of use of beds is usually found for the six months beginning with January, if compared with the other six months of the year. Hospital administrators may take advantage of this condition by doing repairs and renovations, so far as possible, during the less active months.

A tabulation of individual hospitals presents some interesting points, as shown by Table II in the Appendix.

It should of course be one of the prime aims of hospital administration to utilize the facilities of the plant to their fullest capacity. Good hospital administration should show a higher average use of beds than 70 per cent. for a year. Conditions will vary among general hospitals. Conditions in special institutions, such as hospitals for maternity cases, children, chronic cases, etc., must be considered on their own merits. Thus, in the Cleveland City Hospital, certain large units are set aside for tuberculosis, neurology (including many alcoholic cases), venereal diseases and contagious cases, and the demand for these beds is affected by many conditions different from those which affect the general medical and surgical services. It should, however, be the aim of hospital administration to make its internal arrangements as flexible as possible.* While contagious and acute surgical cases are not safely to be mixed in the same wards, there should be a constant effort toward the utmost flexibility of classification so that pressure on one division of the service can be relieved by rearrangements which utilize beds vacant in other divisions.

A comparison of Cleveland figures with those of a number of leading New York hospitals shows the majority of Cleveland institutions in a somewhat unfavorable light. Nineteen hospitals in the United Hospital Fund of New York showed in 1919 an average of 79 per cent. of their bed capacity filled. The lowest hospital showed 63 per cent. and four showed 90 per cent. or over.

On the whole it may be said that a general hospital should be so administered as to run to an average of at least 75 per cent. of its capacity during

*Figures provided by the City Hospital just before this report goes to press show, for the year 1919 and the first nine months of 1920, the details of the use of the different divisions of the hospital. These are as follows: (The figures in the parentheses are for the first nine months of 1920, and the others for the year 1919.)

Department	Beds	Total Days Treatment Possible	Total Days Treatment Given	Percentage Occupied
Tuberculosis.....	100 (100)	36,500 (27,400)	27,447 (16,430)	75.7 (59.9)
Contagious.....	100 (100)	36,500 (27,400)	14,806 (13,859)	40.5 (50.5)
Specific.....	75 (125)	22,500 (35,250)	13,575 (13,264)	60.3 (38.7)
Observation.....	50 (50)	18,250 (13,700)	12,077 (8,938)	66.2 (65.0)
Main and Convalescent.....	400 (380)	146,000 (104,120)	105,001 (74,614)	72.0 (71.7)

The very wide variations between the degree of use of the different services of the hospital are apparent. It will be noted that the small percentage of use, particularly of certain divisions, has continued throughout a long period of time.

year as a whole, and that an average of over 80 per cent. should be expected during the busier portion of the year. A figure as high as 90 per cent. ought to be the goal.

In estimating the hospital needs of a large community, however, it would be safe to expect a percentage of utilization of hospital beds as a whole throughout the year to be more than 75 per cent. at the present time, even in the face of a general shortage of beds with consequent increase of pressure. The Survey has sought to point out the necessary inflexibilities of hospital arrangements and the irregularity of demand throughout the year to account for this seeming inconsistency.

In the map on page 823 are shown the eight "Health Districts" used by the Cleveland Division of Health for administration purposes. The hospital population of the city on the two census days was tabulated with reference to location of residence of the patients according to these health districts. Comparison with the map will assist in interpreting Table III in the Appendix which gives this tabulation.

A glance at this table and at the map shows that the hospitals of the city have not been located according to any general plan, nor to any great extent with reference to the needs of any particular locality. Thus District II and District VIII show the largest proportion of cases in the hospitals, but this is what one might expect considering the congested residential character of District VIII, and also the enormous business and industrial population of District II, during the working hours. A large amount of demand for hospital attention invariably arises under such conditions, yet the hospital in District II is Huron Road, and the district has less than one-third the number of beds per thousand of population that are provided in Health District III, which, with three times the proportion of beds according to population, shows less than one-third the number of hospital beds per thousand. Comparison with District VII is also instructive.

A number of hospitals are found located near the boundaries of districts, but belong to the one as much as to the other, but the more fundamental fact is that the range of service of many hospitals has very little relation to the district in which it is located. Table IV in the Appendix shows the proportion of cases on the first census day registered in each hospital from each health district.

A further study of the individual hospitals on the second census day and of some cases for other periods, showed quite clearly that hospitals can be divided into two groups, with respect to their range. One type, such as Huron Road, Lakeside, City, Mount Sinai, St. Luke's, and St. Vincent's, which may be practically called a city-wide range. The proportion of patients drawn from their own vicinity is no larger, or is less than one would expect in proportion to distribution of population. In the other group are hospitals such as Fairview Park, St. John's, Glenville, Lutheran, Provident, St. Eusebius, St. Ann's, and St. Alexis, which show a large proportion of patients drawn from their own vicinity. The difference between the two classes is more striking when the figures for the individual hospitals in the latter

class are examined in detail. In some instances from two-thirds to three-fourths of the patients are found to be drawn from the hospital's own district or a neighboring district, so that the great bulk of the hospital clientele is local. Generally speaking, the range of the larger hospitals is wider than the range of the smaller ones.

The facts shown in these tables are of importance in connection with the location of future hospital units, and will be referred to later in that connection in the section on Community Planning.

It is important that each board of trustees understand the range of its own hospital. Adaptation to the special needs of its clientele is a very different matter in a hospital which serves primarily its neighborhood from the case of one which draws from all over the city and from the environs.

The most important summary conclusion to which the data in this section lead is the shortage of 1,500 hospital beds in Cleveland in 1920. The work of the existing hospitals has been unduly limited, because of this shortage, to urgent surgical and to maternity cases. Medical and special work, particularly for children, has not been provided for in any adequate degree. Study of the Cleveland hospitals reveals these conditions quite clearly, and they are thrown into relief by comparisons made with New York and Boston. It is apparent that while the best administered hospitals of Cleveland have used their beds to as full capacity as the best institutions elsewhere with which comparisons have been made, the hospitals in Cleveland as a whole have fallen below a desirable percentage of utilization of their theoretical capacity, even in the face of the community's need for beds. Some of the reasons for this have been indicated, and the need for flexibility and efficient administration has been pointed out as a remedy.

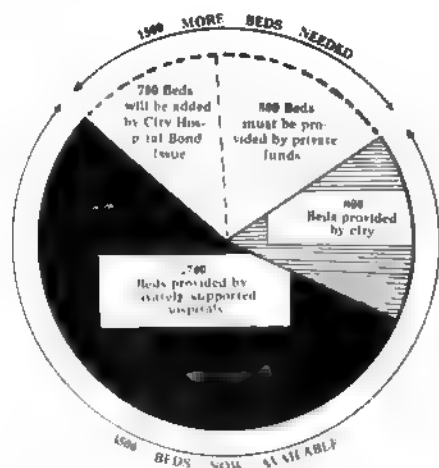


Fig. 11.

Provision and Need for Hospital Beds

Distribution of hospitals according to sections of the city shows lack in the past of any general planning and the need for the formulation of principles by which the locations and functions of future hospitals can be determined. It is apparent that there is special need and large demand for hospital service coming from the central section of the city, and inasmuch as a considerable part of the need from this section is known to be of an urgent character, future plans for the location of hospitals must take into consideration local provision for this central section.

It has been sought in this section to point out not only general matters of interest to the city as a whole, but to indicate some of the kinds of facts which hospitals need to know about themselves; which the trustees and their representatives should have periodically reported to them. In how many hospitals do the monthly reports to the trustees show, for instance, the percentage of beds used in each of the main divisions of the hospital in proportion to the theoretical capacity of each division? Shrewd business men know just what facts to demand in regular reports from their own enterprises so that they shall be able to determine whether or not the business is well run. Trustees should be as discriminating in the selection of the facts which they ask to have set up as the guideposts for the business and policy of their hospitals.

ORGANIZATION FOR SERVICE

A hospital is much more complex than most business organizations of equivalent size. Its peculiarity is the inclusion of a number of different professions, each highly specialized, which must work together and which must be kept in effective working relations. The basis of a hospital is its medical staff, but in addition to this medical element, is the business administration, represented by the business men of the trustees, by the superintendent, and by his administrative assistants; the nurses, another highly specialized and well organized group; social service, representing still another and different type of work in the hospital; and finally, the housekeeping, mechanical, and clerical groups, who maintain the essential daily routine of the plant. It should be added that while the emphasis of the work of most superintendents is on the business side, the superintendent ought to interpret, develop and represent all phases of a hospital's activity.

Hospital personnel thus includes such widely varying elements and draws them into such intimate relationship that the successful organization and administration of a modern hospital is a difficult matter requiring special training and skill. There are stated at the end of this chapter a series of recommendations regarding hospital organization to which the discussion of this chapter aims to lead, and which it endeavors to interpret.

The basis of hospital organization may be one of three types. The first, which is found only in the proprietary hospital, is a group of stockholders or owners of the hospital corporation, who may or may not have an interest in the professional and welfare activities of the institution. The second type, as represented by City Hospital, is under the direction of a single man, the Director of Public Welfare, who appoints the executive officer and staff of the hospital. The third type, the usual form of organization of privately supported hospitals, is that of a board of trustees. Certain hospitals which are under the control of religious organizations fall somewhere midway between types two and three.

It is proper enough that there exist proprietary hospitals as a form of business enterprise meeting an apparent public demand, but no hospital which aims to be in the public service class can expect to receive public confidence and support unless it has as its governing authority an individual or group possessing the point of view of public service, without financial interest in the operations of the institution.

The conditions found in the City Hospital of Cleveland indicate very clearly the need for more general public interest in an institution of major importance, such as this. The most serious administrative deficiency found at the City Hospital by the Survey was in the nursing service. So great a shortage of nursing service was found that the conditions amount to a serious neglect by the city of its solemn responsibility for the humane care of sick and helpless citizens. It is recognized that the ultimate responsibility rests with the citizens of Cleveland, who should have appropriated more money for the maintenance of City Hospital. More immediately, the responsibility rests

with the appropriating authorities of the Cleveland municipal administration.* The executive officers of the Department of Public Welfare and the City Hospital should be held responsible for voicing the need in a clear, effective, and persistent way, both to the appropriating authorities and to the public. There is not evidence that sufficient attention has been called to the conditions by the administrative officials who have been aware of them.

In the nursing service of City Hospital a decided shortage of students exists, and in some instances, of the supervising staff also. It is a conservative estimate that there are only about one-third as many students as are needed for the number of patients, as 63 students are assigned the 481 beds used for training—a ratio of one student to 7 or 8 beds. The ratio of students to beds was in actual practice lower than this—one student to 10 beds in the general services during the day, and one student to 40 beds at night. Due to the shortage of student nurses, ward attendants have had nursing duties assigned to them for which they were entirely unqualified.

The presence of a board of trustees or of a visiting committee who were actively interested in the hospital might probably have been of great service to the administrative officers of the hospital and to the Director of Public Welfare in making apparent to the municipal administration and to the general public the needs of the City Hospital and the gravity of the present deficiency. As the Survey has recommended, an appropriation of \$150,000 a year for nursing service is necessary for at least the next year or two in order to secure a sufficient number of graduate nurses to provide a minimum of satisfactory care for the patients. If, as the Survey has also recommended, a sufficiently capable head of the training school can be secured with an adequate corps of trained assistants, it is probable that the training school can be so built up that the amount just mentioned can be diminished in future years, as an increased number of student nurses is received, up to the maximum for which the hospital can provide suitable training.

At Warrensville Infirmary the lack of medical and attendant service is so grave, and here again the institution has been lost sight of, even by suggestions of the public which, if they knew the facts, would be interested to use public opinion to better conditions. The need is not only for more medical staff and attendants at Warrensville, but also for recreational facilities for old people and others who are patients and who need some element in their lives beyond the barest minimum of physical care; also for the employed help of the institution, who, particularly under present economic conditions, are obtained with difficulty in a place which is relatively isolated in comparison with other places in which as good, if not better, wages, can be secured. Much in this direction would gladly be done by volunteer assistance if the right people knew the facts and were interested to be active in the matter.

It has been recommended by the Survey that the Cleveland City Hospital be governed by a board of trustees, which would require a change in the

*It is recognized that legal restrictions upon municipal taxing power have placed considerable limitations upon Cleveland's expenditures for public services, as in many other cities.

city charter. It may be pointed out that from the standpoint of efficiency, government by a director need in no way suffer in comparison with government by a board of trustees. The effectiveness of either form of government depends upon personnel, the recommendation in favor of a board of trustees being chiefly that of greater stability through changing municipal administrations. This again may work for good or ill, depending upon personnel. At some periods it would serve to retard progress, and in others to prevent disruption following a political overturn. On the whole, however, a board of trustees is desirable.

Even under the most ideal conditions of municipal administration, a city hospital needs to be brought in contact with its community, and this can best be secured by attaching to the institution in some way a group of disinterested citizens, men and women, who will visit it, be in touch with its work, help its governing and executive officers by friendly advice, and above all else, interpret the institution, its work, and its needs to the financial appropriating authorities and to the public as a whole. The formation of a strong board of trustees best accomplishes these purposes, but if this proposal proves unacceptable, some progress toward the same result may be accomplished by a properly selected visiting or auxiliary committee, appointed by the Director of Public Welfare; such a committee of course having only advisory powers. The degree to which such a board will be of practical service will depend almost entirely upon the Director. He has it in his power to stimulate the board to activities which will not interfere with the hospital's activities but be of benefit, or, on the other hand, he may reduce the group to one on which few capable individuals will find interest in serving. In the absence of a board of trustees, however, the presence of some such advisory body is highly advisable.

A hospital which is managed by a religious sisterhood will do well, as four such hospitals in Cleveland have recently done, to appoint a lay advisory committee which will exercise much the same functions as a board of trustees though without the legal authority usually vested in them in other hospitals.

For the typical hospital, privately incorporated, there should unquestionably be a board of trustees. Such bodies are usually either self-perpetuating or elected by a hospital membership or by church or other organizations which constitute the hospital corporation. Members of boards should have definite terms, and the personnel should change slowly, a few terms expiring each year. Many of the chief deficiencies in hospital administration in Cleveland and elsewhere have arisen because of defects in the make-up of the board of trustees or in its relationship to other groups in the hospital organization. The composition of boards of trustees has too frequently been determined by an historical accident which threw together a group of doctors and lay business men who together made up the original body, or on the other hand the board is composed entirely of business men, who are usually immersed in affairs, and leave to the medical staff or to one or two of their own number, practically the whole responsibility for administration of the institution.

Perhaps the most frequent cause of difficulty in Cleveland has been the existence of a number of different boards or groups within the same hospital, without clear definition of their respective powers and duties. Thus there may be found a board of trustees, a board of managers, and an auxiliary board in the same institution. The personnel of one of these groups may be entirely women; of another, entirely men; the third may be also of women, or of both men and women. The original reason for the formation of these different bodies was obviously the desire to interest as many persons as possible in the hospital for the sake of moral and financial support. Principles of organization applicable to hospitals as well as to business establishments require that there shall be one governing authority. The existence of other boards or committees is not inconsistent with this principle, but the provisions of the by-laws and the actual practice of the hospital should make it quite clear that a single body which should be known in general as the "Board of Trustees" has complete authority*, and that all other committees or groups have advisory powers or delegated powers only; nor should powers be delegated by the board save to committees which include some of its own membership. Delegation of power to other committees almost invariably leads to division of authority and confusion in administration.

In a few hospitals where numbers of different boards and committees exist, a simple remedy is practical—consolidation. There are usually found a certain number of active members within each committee, just about enough altogether to make a single effective governing body.

A board of trustees of a hospital ought to include within itself all the chief elements with which the hospital is concerned. Boards frequently suffer from being composed entirely of business men. Boards of trustees should include other elements which enter deeply into the work of a hospital. Education is one of a hospital's interests, in relation to nurses, to medical study, and to the community in general along health lines. Every hospital, particularly those connected with medical schools or maintaining training schools for nurses, should include in their boards one or more persons interested in or connected with educational activities. Men and women concerned in the philanthropic and social service relations of a hospital likewise represent an element which ought to be on every hospital board. Selection of personnel from the business, educational, philanthropic, and other elements which ought together to make up the circle of interests of a hospital is no easy task, for the group as a whole must not be too large, it must be harmonious, and must be capable of prompt and effective action. Such mingling of interests in the personnel of a board is a goal to be sought for. Men experienced in the management of business affairs constitute a necessary and valuable element, but men and women interested and concerned with other activities need to be sought for and included.

It is perhaps not quite clear to the average person why the physicians who do the medical work of a hospital should not be members of its board of trustees. The accumulated experience of hospitals throughout the country

* It is well to restrict the use of the word "Board" to this one body, and to use the term "committee" for all other groups, medical and lay.

is against such membership. The physician who is on a hospital staff or who is in active practice will have, if a member of the board of trustees, a double position and a double interest. The word double is not to be interpreted as meaning selfish. As a member of the board, the physician is in a position of authority over the hospital policies. As a member of the staff, he is connected with the conduct of a definite piece of work—carrying out these policies within the hospital. So long as hospital staffs are made up of practising physicians, each of whom gives a portion of his time to the hospital service, the selection of a few of these men for membership on the board of trustees is certain to create difficulties. The medical knowledge and interest of the physician is the professional guide to which the board of trustees must give attention, but this guidance from the medical staff can best be furnished through the medical staff's own organization, acting as a professional body and related to the board through a suitable committee and through the superintendent.

The nursing work of a hospital is another element of great importance in the daily administration of the hospital, and one which at the present time presents especial difficulties. A special section of the report of the Cleveland Hospital and Health Survey is devoted entirely to nursing (Part IX.) Here it may be mentioned merely that the relation between the nurse and the hospital administration in the past has been largely through the nurses' training school. As the nursing report shows, hospitals have been too ready to utilize their training school for nurses as a means of securing cheap labor. Part of the young woman's payment for receiving education in nursing has been rendered by giving manual service. Nurses are too much in demand to permit these conditions to continue. While part of the education of a nurse lies necessarily in the hospital and dispensary, where practical experience must be gained, the education of the future nurse and the daily conduct of the hospital routine cannot be identified so closely in the future as they have been in the past. The education of nurses must stand in a greater measure on its own feet, as an educational enterprise, affiliated with the hospital more along the lines of the affiliation between medical school and hospital. The routine work in caring for patients must be conducted in a larger measure by women who have already had their educational training for the work, and who do not receive an educational course as part of their compensation. The varied activities which have been carried out in the past by the graduate nurse and the pupil nurse must in the future be conducted by an apportionment of tasks among graduate nurses, attendants, maids, and orderlies.

In its relation to hospital organization, this may mean physical separation between the training school and hospital in many instances, as outlined in the nursing report. The conduct of training schools by hospitals as part of their own organization requires special knowledge and usually a special committee, in order that educational policies may be developed, and educational standards maintained. For these reasons, the special training school committee recommended in the plan of organization is deemed desirable. The relationship proposed between the trustees, the training school committee, the superintendent of the hospital, and the head of the nursing service, should be considered carefully.

The social service department represents the newest element to enter the hospital, and its position as yet has not received universal recognition. In a number of the best institutions, however, in Cleveland and elsewhere, the social service department is developed and its place is fairly well defined. Few boards of trustees and few superintendents have at the present time sufficient knowledge concerning the policies and the methods that should prevail in a social service department to be able to guide it properly. A special social service committee is therefore thought desirable, to serve with advisory powers only, and to help in developing the social service of the hospital so as to be of the maximum assistance to its medical work.

A failure on the part of the board of trustees to give sufficient authority to their executive officer, the superintendent, is another source of weakness in not a few hospitals in Cleveland as elsewhere. More than one executive head in an organization is an obvious weakness and danger. To manage a modern hospital with all of its varied interests and all the widely differing groups within its personnel, requires a man or woman of unusual ability and tact, and with special training. Everywhere in the country the number of such qualified persons is at present far below the demand. The board and its advisory committees need to supplement the superintendent in advisory as well as in directing ways. It will be observed that according to the plan for hospital organization outlined in the following, the superintendent stands in a central position, meeting with the board on the side of hospital administration, and with the medical executive committee on the side of the hospital's professional activities.

A third aspect, which is not mentioned in the plan of organization, but which may be taken for granted, is the superintendent's relation to his administrative departments; the steward, the dietitian, the engineer, as well as the head of the nursing and of the social service departments. Periodical conferences between the superintendent and the administrative group are desirable. Medical, nursing, social, and administrative interests within the hospital render it desirable that from time to time representatives of all the different groups be brought together for their better mutual understanding. Recommendation number 6 points in this direction. It is particularly important that members of the board of trustees shall understand personally the hospital inter-relationships and the different parts of its work, and that they shall come into contact at first-hand with sources of information. Through such conferences held from time to time for the discussion of selected problems, this can be achieved. There is no stimulus to members of a managing board like direct contact with facts and with the people who are doing the work over which they have authority.

"What is the whole duty of a Trustee?" is perhaps the fundamental question concerning hospital organization. How is a man or woman living in a great city and with business or other definite vocation, to give sufficient time to a hospital really to understand its work and to be able to meet to the full the responsibilities of trusteeship? The question cannot be answered in general terms, for the activities of a modern hospital are so varied and so technical that few members can come into sufficient touch with all of them to have sound judgment upon all questions that may arise regarding any

one of them. Yet, by division of labor among the members of a board, and above all, by a really active sense of responsibility made effective through the leadership of the president or other officers, a reasonable degree of knowledge of the work of the hospital can be gathered by each member, and the sum total, when the board gathers together, will be sufficient to render the trustees a truly responsible governing body.

It is of particular importance that the trustees understand what facts they should know of periodically, so that these may be presented in the monthly and annual reports of the superintendent. The percentage of beds used in each division of the hospital has already been mentioned as one of these important facts. The length of stay of cases in the different divisions of the hospital is another. At the time of the Survey census, it was found that taking the general hospitals of Cleveland as a whole, 44.6 per cent. of the patients had at that time been in the hospital from three to fourteen days, 13.2 per cent. had been in the hospital less than three days, 19.2 per cent. between fourteen and thirty days, 9.2 per cent. between one month and two months, and 12.9 per cent. more than two months (9% not stated). The proportion of cases staying for these longer periods is higher than it should be in hospitals designed primarily for acute stages of disease. The reason lies largely in the lack of dispensaries and of facilities for convalescent and chronic patients in Cleveland, to which attention will be devoted later in this report. A study of individual hospitals showed wide variations in this figure, ranging from no patients staying over sixty days to as high as 29.9 per cent. A report showing the length of time that patients have been in the hospital, and the number in the various divisions of the hospital who had been there more than a normal period, should be of distinct value to the trustees as well as to the medical staff and the superintendent.

Statistical record of patients who have been refused admission is another item of significance. Monthly reports should show the number of refused cases, classified by the main type of case, i. e., medical, surgical, children's, etc., and classified also according to whether the applicant was for a pay, part-pay, or free bed, and with classification according to reasons for rejection. Not a few hospitals fail to keep any memorandum of cases refused admission because of lack of room or other reasons. Data as to whether or not a waiting list is maintained, or whether refused cases are placed on the waiting list, are also of value, although the maintenance of a waiting list is not always practicable.

Statistics regarding the results of care have been developed somewhat through the American College of Surgeons, but their further development and the regular reporting of the condition of patients at discharge and at specified periods thereafter should be part of the regular reports of hospitals in the future. Similarly in dispensaries, the trustees should know what proportion of patients pay one visit and never come back to continue needed treatment.

Those items are mentioned here merely as illustrations and of course are in addition to the ordinary statistics of the number of patients admitted, the number of units of work done in each of the chief divisions, and the financial

figures showing income and expenditures for the various departments of the institution. In the section on individual hospital planning we shall return to this subject and summarize the more essential facts which a hospital or dispensary should gather and present regularly for the information of its governing body, its supporters and the public. To substitute guidance by facts for guidance by impressions and by hearsay is the goal of the best administration.

SUMMARY OF PRINCIPLES OF HOSPITAL ORGANIZATION*

1. The final governing authority of the hospital should be a Board of Trustees. No member of the Board should be a member of the active or consultant medical staff of the hospital. Hospitals which are under a religious or public city or federal organization and which therefore cannot have Trustees, should appoint an Advisory Committee similarly constituted. In addition to the men members of the Board of Trustees who represent chiefly financial, administrative and broad public interests and experience it is of much importance that there be included on the Board of Trustees a representative of some institution of higher education, viz: University, Normal College and women members whose experience and interest can be relied upon to contribute constructive ideas and opinions.

2. The appointment of the medical staff should be vested in the Board of Trustees. All members of the staff, chiefs of services, or assistants should be appointed by the Board for terms of one year renewable by the Board. The nomination should be made on the initiative of the Board of Trustees or of the Medical Staff or of an executive committee of the medical staff. The Board of Trustees should consult with the Superintendent, or Chief Executive Officer, before confirming the nomination of a Medical Staff, or of individual members thereof.

3. The Superintendent of the hospital should be appointed by the Board. He should have entire administrative authority over all departments of the hospital. Under the rules and regulations adopted by the Board of Trustees, the Superintendent of the hospital should have authority to nominate or appoint all heads of departments and employes. This implies the authority for discharge or dismissal of any employe for cause. The superintendent should be the representative of the trustees in relation to the staff or outside interests.

4. The medical staff should be definitely organized for the promotion of team work, common policies and satisfactory relations with the administration of the hospital. Regular meetings of the medical staff or sections thereof should take place for the discussion of professional work. For guidance in organizing such professional conferences the recommendations of the American College of Surgeons are called to the attention of the medical staffs of hospitals. The staff should be organized into divisions or services, medical, surgical, etc. It is desirable that there be a recognized chief for each division.

* Prepared in collaboration with Haven Emerson, M. D., Director of the Survey, and W. L. Babcock, M. D., consultant on Hospital Administration.

(a) Provision should be made in the By-laws of the Hospital for the recognition of physicians, not members of the staff, whose practice in the hospital complies with definite hospital standards. It is recommended that these physicians organize into an auxiliary staff, without service or voting power, and that a delegate or delegates from this staff be recognized by the Trustees and Attending Staff as their representative.

5. There should be a Medical Executive Committee composed of members of the medical staff, selected by the medical staff or by the Board of Trustees on the nomination of the medical staff. The Superintendent of the Hospital should be a member of this Committee. The total membership of the Committee should not be so large as to be unwieldy. Seven members is generally the maximum desirable.

6. It is recommended that the Board of Trustees of hospitals arrange for periodical conferences of designated members of the trustees, of the medical executive committee, the superintendent and administrative officers such as the heads of the training school or nurses' service, and of the social service department. This joint group should meet periodically for the discussion of hospital policies or administrative matters.

7. The staff of the dispensary or out-patient department should be appointed according to the principles above laid down and the physicians serving in the dispensary should receive definite recognition as members of the hospital organization and staff. For each department of the dispensary there should be designated a chief of clinic who should be under the general authority of the chief of the corresponding department of the hospital, but who should be directly consulted by the superintendent or the assistant superintendent who is in charge of the dispensary on all matters affecting the dispensary. The chiefs of the dispensary service should constitute a Dispensary Medical Committee which with the superintendent, the assistant executive in charge and such others as may be designated should meet from time to time on dispensary matters. It is suggested that a representative of the dispensary staff be a member of the Medical Executive Committee.

8. The medical staff of the hospital acting thru the Medical Executive Committee and the Superintendent should formulate a definite set of standards, subject to ratification by the Trustees, for all professional work of physicians in the hospital touching such matters as attendance, the making and supervision of records, diagnosis, use of laboratories, X-Ray and other diagnostic aids, the duties of residents and internes, the inter-relation of staff physicians and outside physicians, the matter of fee-splitting, etc.

9. Physicians not members of the hospital staff should be entitled to send to the hospital and to treat therein private cases in rooms or wards, subject, however, to such limitation as to number of beds to be allotted to outside physicians as may be formally made by the Trustees, and provided that the physicians treating such cases conform to all standards made by the Medical Staff.

10. No physician should receive a fee from patients other than such fees as may be permitted to staff physicians nor should any physician receive a fee from a patient unless the charges for the hospital care have been met according to the rate established for various rooms or wards for members of the staff and outside physicians alike.

11. In such hospitals as may still continue to keep a training school as part of the hospital organization there should be appointed by the Board of Trustees a training school committee composed of both men and women, to direct educational policies. This committee should include representatives of the Board of Trustees, with other persons known to have had experience in education, and also members of the alumnae of the nurses' training school. The superintendent of the hospital and the director of the training school in the hospital and representatives of the medical staff selected by the medical executive committee, though not members of the training school committee should sit with the committee.

Among the Catholic hospitals or in hospitals administered under a religious organization which have no boards of trustees and are subject to the direction of the Bishop of the diocese, a committee on the training school, advisory to the Bishop, might with advantage be established at once to direct the educational policies of the training school.

The relationship between schools of nursing and hospitals should be essentially the same as that created between medical schools and hospitals. The School of Nursing, like the medical school, should exist primarily to give technical education to students who are to obtain part of their training in the hospitals.

An ideal organization for a school of nursing which should be realized in Cleveland as soon as circumstances permit is clearly the University organization in which ward training would be given in such hospitals as come up to the conditions required by the University for educational purposes for its students.

12. The superintendent of nurses in the hospital should be appointed by the Board of Trustees of the hospital, on nomination of the superintendent of the hospital with the concurrence of the training school committee. She should have administrative authority, subject to the superintendent of the hospital, over the entire nursing service and she should be responsible for the educational standards and policies as laid down by the training school committee. It is considered desirable that the superintendent of the hospital should delegate to the superintendent of the training school the appointment and dismissal of nursing personnel.

The offices of principal of the training school and superintendent of nurses, are educational and administrative offices, respectively, and may or may not be combined in the same individual. When they are combined the head of the training school should be designated "Superintendent of Nurses and Principal of the Training School."

13. The Social Service department of the hospital should be under the direction of a head worker who should be responsible to the superintendent. It is recommended that there be a Social Service Committee, which among other members, should include one or more of the trustees, of the medical staff and the superintendent of the hospital.

THE HUMAN PROBLEM OF THE HOSPITAL PATIENT

"Treat not only the disease, treat also the man." These words of Rudolf Virchow set the standard for the highest form of hospital service. Two or three thousand patients who are in the hospitals of Cleveland, present the hospitals not only with a variety of bodily ills, but with problems of personality and environment which are as varied as human nature, and which influence vitally the ultimate success of the hospital's mission to maintain as well as to restore health.

Virchow's words set not only a standard but express a warning, for the hospital's great danger is overspecialization—attending to pathology and overlooking personality. Successful work in the operating room may be independent of what the patient is or thinks or feels, but successful restoration of the patient to health and living efficiency depends not only on the surgery but on the patient's state of mind after he goes from the operating room to his bed in the hospital and from his bed in the hospital to his home.

In a survey it is necessary to consider persons as well as patients, in order that a true picture be given of the hospital's services, of their relations to the community, and of their values and deficiencies, as judged by final results in making people well and humanly efficient. The Survey therefore endeavored to study the people and their reaction to the hospitals of Cleveland as well as the hospitals of Cleveland in their relations to people. Several hundred interviews and conferences were held with physicians, including both members and non-members of hospital staffs; with nurses in hospitals and in public health fields; with social workers; with organizations of the foreign-born; with church workers; and with people more or less at random in their homes or elsewhere.

Those who are accustomed to hospitals too often fail to recognize how odd and strange an experience, to the average patient, is his first contact with a hospital. The admission procedure, the unfamiliar antiseptic odors, the sight of many sick people, the precise business-like efficiency of hurry-up nurses and doctors, fill many a patient with vague and uncertain ideas of what may be going on behind the many closed doors, and what may be happening to himself. Courage is easily lost in the strange institutional atmosphere. The educated man who is familiar with hospitals, having previously been a patient or a visitor, and who is self-confident and resourceful even during sickness, is in quite a different position from the uneducated immigrant who has never had contact with doctors or hospitals in his life, or the timid woman, or the sensitive child.

It is not that hospitals or their personnel lack kindness in the treatment of patients. It is their business to be helpful, and hospitals and their doctors, nurses, and other personnel generally are, but it is rather that hospitals are helpful in a professional and technical way, while the patient is usually full of worrying questions he would like to have answered, of forebodings which it would be desirable to dispel, of states of mind which depress and which, if maintained, will hinder his recovery. These forebodings

and these states of mind require not merely a general attitude of kindness, but sympathetic insight, clear analysis, and definite action to dispel.

The human problem of the hospital patient can be perhaps best illustrated by the foreign-born. On the two Survey census days, 68.1 per cent. of the adult patients were American-born, and 36.9 per cent. were foreign-born. According to the estimates in 1917, of the Cleveland Americanization Committee, there were 744,728 total population in the city, of whom 231,939 were of foreign birth, 466,142 native born of native parents and 281,586 native born of foreign or mixed parentage. Those of the third group are largely children. Taking these figures, we find that the 231,939 foreign-born are 49.7 per cent. of the 466,142 native born of native parentage. This figure may be roughly compared with the percentage of foreign-born adults in the hospitals of Cleveland, which was just stated as 36.9 per cent. This illustrates an important point which studies in other communities have verified—that the foreign-born adult generally uses the hospitals less than the American-born adult. This is largely because of lack of familiarity with an institution with which many immigrants had little experience, previous to coming to this country. It must be remembered that a large number of recent immigrants have come from small towns and many of them think, "Hospitals are places where you go to die." A considerable proportion of the foreign-born patients, moreover, speak little or no English.

The attitude of the foreign-born toward the hospital reflects all the lights and shades of the hospital's own attitude toward its patients of foreign birth. Frequently the very human and impressionable surface which the foreign-born presents ready for the hospital's sign and seal, is masked behind an enforced silence because of unintelligible speech. Too often the phrase "those ignorant foreigners" shows merely lack of understanding by the American-born. A common language is the searchlight most useful in discovering physical, racial, or temperamental needs, and means of adjusting the hospital regime to treat these. When the hospital has given time and thought to its task, it has been able through sympathetic interpretation to convince the patient of its friendly interest, its ability in diagnosis, its skill in treatment, and when this conviction is made doubly sure by intelligent follow-up work in the home, there is every evidence that the hospital's work is worth while, that the patient is grateful and appreciative, and that the experience has been of permanent educational value to him in the matter of personal and public health and in the growth of a sense of social and civic participation.

The result is different when the hospital has had no specific machinery for getting at the back of the foreign patient's mind, and making the somewhat inflexible and mysterious hospital routine less a puzzle to him. The patient's mild skepticism as to whether American hospitals are good places for the foreign-born, increases to a large doubt. This is further enlarged by his friends, who have trouble in being understood at the inquiry desk; who may be unable to talk with the doctor or to get the diagnosis. If a medical case, the patient worries through a retarded convalescence and goes home glad to be free— and wondering! If a surgical case, often his climax of

protest against the vast unknown of hospital machinery is a refusal to permit operation. He leaves against advice, grateful for the somewhat peremptory discharge of the hospital, which in turn, feels inwardly affronted that its effort to help should be powerless before his unreasoning "stupidity."

In seven hospitals the proportion of foreign-born adult patients was over 30 per cent., the maximum being as high as 47 per cent. No hospital in Cleveland has made any definite provision for interpreters, either as a matter of promoting the ease and comfort of the patient, or of increasing hospital efficiency. As a rule the hospital is concerned with "making the patient understand"—"We manage to make them understand somehow." Some other patient of the same mother tongue who has learned English is pressed into service, or an employe or a visitor is called upon. The problem, however, is not merely "making the patient understand," but is to render the patient "understood."

The following table, based on the average of the two Survey census days, showed an interesting phase, the contrast between the proportion of pay, part-pay, and free patients among the adult foreign-born and the American-born patients in the hospitals of Cleveland.

HOSPITAL PATIENTS ON TWO SURVEY CENSUS DAYS, AVERAGED

	American-born		Foreign-born	
	Number	Percentage	Number	Percentage
Pay.....	989	39.2	351	23.8
Part-pay.....	735	29.1	444	30.1
Free.....	733	29.1	631	42.8
Information not furnished.....	66	2.6	48	3.3
Total.....	2,523		1,474	

The table indicates what one would expect, that the foreign-born show a much larger proportionate use of the free beds. The generally higher economic status of the American-born is doubtless sufficient explanation.

One important relation of the hospital to the community is the furnishing of information about the condition of patients. Patients themselves want to know how they are getting on, and their relatives and friends likewise wish this information. Hospital staffs and administrators must use their discretion in what they tell the patients or relatives, just as private physicians do, yet the hospitals often fail to give elementary and necessary information or to give it in a way which will be helpful or even useful.

Many inquiries come by the telephone. A story has been reported of an immigrant family, very anxious to secure information as to the condition of the father who had been taken to a hospital after an accident. Unable to

speak English, the mother and her children had recourse to the neighborhood druggist. He called up the hospital three times, and was unable to learn anything that would either satisfy himself or relieve the family's acute anxiety. The error was not inhumanity on the part of the hospital, for the information was later furnished readily, but was due to the fact that the telephone operator had not been taught to appreciate the importance of interpreting the hospital to the public. This incident would not be mentioned were it not an illustration of many.

The importance of this duty is often not sufficiently clear to the hospital administration to make them provide adequate instruction to the person or persons who are responsible for answering such inquiries, either in person or over the telephone, or to cause the selection of a sufficiently trained and tactful person to perform this function.

Sometimes a mother is eager to see her child frequently. There are often perfectly good reasons why she should not see the child at all or during certain periods, but not infrequently there is failure to explain to an anxious family why the privilege is denied.

Interpretation of the hospital's work, rules and results to the public is part of the hospital's job. The public includes its own patients, their relatives and friends, and also the broader circle of the hospital's supporters, and any one in the community, in fact, who has a reason to be interested in the hospital's activities. This interpretation of the hospital's work, rules and results, is made partly in the hospital's formal reports and partly through its daily relations with its patients and those interested in them. Too little attention has been given to such interpretation through the channels of the hospital's routine contacts.

The patient's lack of understanding of the hospital is too often matched by the hospital's lack of understanding of the patient. The patient can be greatly helped to understand the hospital by the right procedure at the time of admission. Hospitals which maintain dispensaries should use the dispensary as the means through which patients are admitted to the wards. The provision of a trained and tactful member of the social service department in connection with the admission desk of the dispensary will serve to start many patients, who will later be referred from the dispensary to the wards, with some understanding about hospitals in general and this hospital in particular. From this standpoint, the two critical points in the patient's hospital career are the day of admission and the time of or just before discharge.

A considerable portion of patients are sent to the hospitals by charitable societies. On the Survey census days, it appeared that an average total of 201 patients, or 11.8 per cent. of all patients, had been admitted to hospitals at the request of some charitable agency. In the case of these patients, the charitable society stands to the hospital as an interested party. If its work with the patient and with the family is to be successful, it may need to know the physical condition of the patient, and the prognosis. It

is the duty of the hospital to cooperate with the charitable society by furnishing the necessary information, consistent with the interests of the individual patient.

The hospitals have not always met this responsibility completely or wisely, because of the same deficiency just mentioned, lack of a definite sense of responsibility for interpreting the hospital's work, and failure to assign a sufficiently trained and responsible person to the task.

A considerable portion of the patients in some institutions come as industrial accident cases, or are sent through a medical department conducted at some commercial or manufacturing establishment. The special report of the Survey on industrial medicine and hygiene (Part VII), deals with this matter, but in an industrial community like Cleveland its importance justifies mention here. The hospitals need to serve industry, and industry should support the hospitals adequately in return for service.

What can the hospital do in relation to the difficult problem of the foreign-born who do not speak English? The calling in of paid interpreters is financially impossible in most of the smaller hospitals. Moreover, no one interpreter can speak every language and almost any language of western Europe is likely to be called for sometime. Few if any hospitals could afford even one full-time interpreter, or could manage to keep such a functionary busy with the particular patients whose language he could speak. The problem of hospital interpretation cannot be solved by paid interpreters employed by the individual hospitals. The chief practical recommendations to be made are these:

If a hospital and its out-patient department are taken together, a sufficient number of patients speaking a given foreign language or group of related languages might come to the institution on an average day to justify and require the entire time of an interpreter, and the work in the two branches could be adjusted so as not ordinarily to conflict. The use of full-time interpreters, however, doing no other work, must necessarily be limited to very large institutions, such as the new City Hospital will be. Most hospitals which receive patients not speaking English should solve the problem of interpretation by depending on specially trained nurses or social workers or by calling in the aid of outside organizations interested in the foreign-born or of the foreign-born themselves. Hospital superintendents in engaging employees for certain positions should consider ability to speak certain foreign languages as an asset and a reason for the engaging of a particular individual. Really good interpretation in securing medical and social histories and in meeting the patient's human needs while in the hospital, cannot be obtained by calling in an uneducated orderly. The main reliance should be upon nurses and members of the social service department who have a definite professional sense of responsibility for the hospital patients.

In communities having a considerable number of foreign-born of any one race group, cooperation can usually be obtained from immigrant organizations themselves. These organizations should be encouraged to serve as

visitors to patients of their own race who have not other friends and in helping with the more difficult and special cases in which interpretation is necessary and beyond the power of any employe of the hospital. Enough hospitals are now utilizing outside cooperation of this sort sufficiently to show that it is gladly provided by immigrant organizations (or by American immigrant welfare societies where they exist) without cost to the hospital and to the mutual benefit of both sides. Such an arrangement with immigrant organizations would go a long way toward promoting general understanding of the hospital by the people of that group in the community.

These plans, however, cannot be effective unless some department of the hospital and ultimately some individual is definitely charged with organizing and keeping up the system of interpretation. Generally speaking, the social service department should be charged with this responsibility and some member of the staff of the department should be selected to carry out the responsibility who is especially qualified and interested. A hospital which has any considerable proportion of foreign-born patients should make a point of having in its social service department someone who is able to speak at least one of the foreign languages common among patients and who has secured special knowledge and training in the backgrounds and characteristics of several immigrant groups so that she is capable of fulfilling these duties. This will involve some inside work with various hospital employes, particularly nurses and other members of the social service department; the use of phrase books; the encouragement of various means by which nurses and social workers may secure knowledge about the backgrounds and characteristics of the chief immigrant groups. An effort should be made to interest internes in the same, and this should have the support not only of the hospital superintendent but of the chiefs of the medical staff. It should be made apparent that thus better histories can be obtained, better cooperation of the patient secured, and better medical results achieved.

The critical moment for the patient, from the standpoint of disease, is often the time of admission to the hospital, but the critical time for the patient from his standpoint as a person is usually at or a little before discharge. In the discussion of the problem of convalescent care (page 000) will be found statistics indicating that a large majority of hospital patients leave the hospital needing some definite form of medical care, either in their homes, in a dispensary, or in an institution for convalescents. The information gathered in Cleveland agrees entirely with the studies and estimates of Dr. Frederic Brush, the leading national authority on convalescent care, that the medical job is not done at the time the patient leaves the hospital. The hospital's responsibility as a hospital is not always to do this medical job, but it must link the patient with the physician, the dispensary, the convalescent home, or other organization which will perform the needed service.

The beginning of this connection is the explanation to the patient (or to his parents, if the patient is a child) of the patient's condition, in terms that will be understood by the lay mind; of what need exists, if any, for further medical supervision; or of what daily routine of diet, hygiene,

exercise, and occupation is desirable during the period after discharge. Explanation to the patient or to those responsible for the patient, of the patient's condition on discharge and what may be called the needed program for after-care, is a definite responsibility which few hospitals in Cleveland have met, save in exceptional instances. It is part of the hospital's responsibility to have a definite system for meeting this need.

At a few hospitals there has been established a so-called follow-up system, usually modeled upon that of the American College of Surgeons. This aims to secure for the medical staff the results of operations or the condition of the patient at a certain period after discharge, such as three months, six months, or a year. Such information is of medical value to the staff, and in the long run will tend to the advancement of medical science and the improvement of service to patients. But the term "fish-up" instead of "follow-up" should be applied to a method which merely secures facts as to a patient's condition a certain time after he is discharged, and does not in some definite and effective way help to make the conditions during this period what they should be. A follow-up and not a fish-up system is the standard which should be set in a progressive community like Cleveland, which wishes to obtain 100 per cent. value from the medical work of the institutions which it supports.

When it is found that six per cent. of 200 patients recently discharged from four of the leading hospitals needed continued hospital care—in other words, had relapsed since their discharge; when it is found that 12.5 per cent., in addition, were living under such home conditions that satisfactory convalescence was unlikely (See Table VII., Appendix), it is apparent that expensive hospital service is easily wasted because of the lack of a little further service which would have made all the preceding work permanently worth while.

"Should the social service department have the responsibility for the problem of after-care?" No! The medical staff of a hospital have the responsibility for the care of its patients, and making a medical program for after-care is a part of that responsibility which cannot rightly or effectively be delegated. When it comes to carrying out the details of the work, the social service department has a definite place, as will be brought out more fully later in discussing this subject. The social service department can assist the staff of the hospital in securing the facts regarding the patient's personality, family housing, home conditions, neighborhood, and finances, which in conjunction with the medical facts known regarding the patient's condition, will enable the responsible member of the staff to formulate a program for after-care. When it comes to assisting in carrying out the program, the social service department generally has been and usually should be called in, either to make explanations to the patient or to arrange for contact with the Visiting Nurse Association, the Department of Health nurses or a charitable society which will be able to exercise supervision, to assist in improving home conditions or in securing the institutional care that may be required.

As the facts in the section on convalescence bring out, the need for financial aid during after-care is approximately much less frequent than the

need for explanation and advice, given in terms of the patient's degree of education and understanding, and of the practical conditions of his environment.

The dispensary attached to the hospital should be used as one of the means of providing after-care of discharged patients. Reference of the patient to the dispensary should be made in every instance where further supervision is necessary and the patient cannot pay a private physician. The follow-up system should insure the actual return of the patient to the dispensary in a large majority of instances.

In summary, the patient's lack of understanding of the hospital needs to be overcome by development of the admission procedure, which should be concerned with more than the elementary procedure of registration, assignment to a definite ward or room, and fixation or remission of fees, and which should include educational and interpretative elements. The special problem of the non-English speaking foreigner should be met at the time of admission, and later through some definite provision for interpretation, both by hospital personnel and through the cooperation of associations interested in immigrants, as above suggested.

The utilization of the dispensary as the place of admission for ward patients will, if the dispensary admission system is rightly organized and its personnel rightly selected, enable the average ward patient to go into a hospital bed with some previous understanding of the situation.

The hospital has a definite responsibility for interpreting the patient's condition to him or to those responsible for him, in terms which can be understood by laymen and which will be a practical help; also of explaining and of helping (at least in the beginning) in the needed program for medical after-care. This is part of the medical responsibility of the hospital, and while a social service department is of great assistance both in securing facts regarding the patient's personality and environment, and in helping to carry out the medical after-care or referring the patient to an agency which will do so, a hospital which has no social service department should still be responsible and be able actually to provide for at least the explanation to the patient or his relatives, and the definite reference of the patient to the needed sources of after-care.

The medical staff of the hospital, through its executive committee, should be expected to define the duty of the hospital in this respect, so the administrators of the hospital can have medical authority behind them for seeing that this responsibility is carried out by visiting and resident staff, nursing and administrative assistants, and by the social service department if there is one.

Answering inquiries regarding patients is a definite part of the hospital's duty to the community and should be fulfilled according to a definite cooperative policy by carefully instructed members of the hospital's administrative personnel. Cooperation with charitable agencies in behalf of their patients is a particularly significant responsibility of the hospital, affecting no inconsiderable proportion of the ward patients.

In the long run, the degree of support of the hospitals of Cleveland will depend upon the degree to which their work is appreciated by the community. The elaborate facilities, equipment, staff, and organization needed for the thorough study and treatment of hospital cases require an increasingly high degree of appreciation on the part of the community of just what hospital work is, what it requires, and what it costs. The foundation of appreciation is understanding. Anyone grasps the beneficent service of a hospital to the emergency accident patient, but understanding of the less obvious and more typical cases, which constitute the large majority of patients, is not so easy. The patient's lack of understanding of the hospital is pardonable at the time of entrance. The patient's lack of understanding of the hospital at the time of discharge is a misfortune to the patient and to the hospital as well. Only on the basis of mutual understanding can adequate support for the best hospital work be built up and maintained in Cleveland.

THE MEDICAL PROFESSION AND THE HOSPITALS

In the City of Cleveland the American Medical Directory of 1918 gives a list of 1,169 physicians, of whom 1,050 are stated to be in active practice. A tabulation of the staff lists of the members of the Hospital Council showed that 309, or 29 per cent. of the total were on the staff of a hospital or dispensary, while 71 per cent. had no such connection. Allowing for the small number of additional physicians on the staffs of the non-council hospitals, it is certainly true that two-thirds of the medical profession appear to have no connection with organized medical service.

A similar comparison made about five years ago in Boston indicated that the proportion of physicians having a hospital or dispensary connection was about 50 per cent. larger. In New York, figures collected by the Public Health Committee of the Academy of Medicine indicated that almost exactly 50 per cent. of the medical profession in New York were on hospital or dispensary staffs. Cleveland thus has relatively more physicians than either of these two cities who are not members of any hospital or dispensary organization.

It is apparent that so far as membership on a hospital staff implies advantages for the scientific study of disease, for the use of special equipment, and for consultation with specialists, the majority of physicians of Cleveland have not these advantages. So far as membership on hospital staff gives control in the use of hospital facilities, tabulation of the Cleveland hospitals by number of beds and size of staff shows that about 25 per cent. of the medical profession have control of about 80 per cent. of the hospital beds.

A patient may of course be admitted to a hospital at which his private physician is not a member of the staff, but if the patient is a ward case, the physician then loses the right to treat him. General complaint was made to the Survey during the first months of its work by physicians who were not on hospital staffs, that they often could not secure admission of their patients to hospitals even as private cases, and of course they also complained of the many instances in which the patients were admitted to wards, when the care of the patients had to be resigned to the members of the regular hospital staff.

A study of the sources from which patients were admitted to hospitals on the two Survey census days showed the following:

Request for Admission	Percentage
By staff physician.....	51.3%
By non-staff physician.....	33.2%
By charitable or relief agency.....	11.8%
Source not stated.....	3.7%

Note—In this tabulation City Hospital, Warrensville Tuberculosis Sanatorium, and Rainbow Hospital are omitted, as admissions at these institutions are on a different basis from those at general hospitals.

These figures appear to indicate that a considerable number of physicians not members of the hospital staffs may and do send their patients to the hospitals and treat them as private cases. It is quite evident, however, that a large number of the 1,050 practising physicians in Cleveland have little if any contact with the hospitals even in this way.

There are wide variations shown in the proportion of patients admitted through non-staff physicians. The variation depends less on the size of the hospital than on the number and organization of its regular attending staff. Thus some of the small hospitals have relatively large staffs, and physicians not members thereof apparently rarely secure admission for their patients. On the other hand, some hospitals of similar size showed on the census days a high percentage of patients admitted by non-staff physicians—proportions ranging up to 83 per cent.

Figures for a group of large general hospitals may be of interest, as showing the wide variation found. These are shown in Table V. in the Appendix.

Part-pay and free cases may be admitted through non-staff physicians, but are rarely treated by other than members of the regular staff. In the group of pay patients, on the other hand, there are a considerable number of private patients among the cases which are admitted through non-staff physicians and who then usually remain under their care.

It must be recalled that these percentages relate only to the two census days, but there is reason to believe that the figures are representative of the usual relationships between the patients admitted through members of the staff and those admitted through non-staff physicians.

The general attitude of a hospital toward the non-members of the staff is expressed by its admission policy. Most hospitals receive private patients and most hospitals have a rule that such patients are accepted, when vacancies exist, from any reputable physician. In practice, however, it is reasonable and inevitable that the members of the officially appointed attending staff have the closest contact with the hospital and are likely to fill a considerable proportion of its beds. When such shortage of beds exists as in Cleveland, the difficulty felt by many physicians not on hospital staffs in securing admission of their private patients is not more than may be expected. There has been no substantial evidence that the administration of the hospitals, year in and year out, has been unduly inconsiderate of the private physician of good standing who sought admission for his patient. Members of the official staff have received reasonable preference but this is only natural. Until more beds are available for private patients of physicians in privately-supported hospitals, present conditions cannot be expected to be radically improved.

In a few institutions there has been found a practice, not formally recognized by rule, but real nevertheless—of holding beds vacant twenty-four hours or even more because certain members of the staff were likely to wish

to send patients in. A practice of this kind is unjustifiable, but is exceptional in Cleveland.

A study of the degree to which members of hospital staffs overlap revealed the fact that, except in the teaching institutions affiliated with Western Reserve University Medical School, there is no large degree of multiple membership on hospital staffs. Even in the case of University teaching at Lakeside, City, and St. Vincent's Hospitals, there is little actual overlapping of the staffs. The number of men holding positions in the staffs in one or more hospitals in Cleveland is shown in the following table:

MULTIPLE MEMBERSHIP ON HOSPITAL STAFFS

233 physicians, or 22.2% of total number, serve on 1 hospital staff										
55	"	"	5.2%	"	"	"	"	"	2	" staffs
15	"	"	1.4%	"	"	"	"	"	3	" "
5	"	"	0.5%	"	"	"	"	"	4	" "
1	"	"	0.9%	"	"	"	"	"	5	" "

These memberships, however, include some inactive as well as active memberships. In general, active membership in more than one hospital staff is not wise, except in the case of multiple membership held for teaching purposes or in the case of men who are engaged in restricted specialties of medicine or surgery and can render these special services to a number of institutions with benefit to all. Of the 42 members of the City Hospital staff, 26 are nominally active members of other hospital staffs. This, however, is a teaching institution. The instances in which a physician is carrying several active memberships in hospital staffs in Cleveland are proportionately small. Some of these individual instances, however, are worthy of notice, and the Survey, in its reports to the several boards of trustees, has called them to the attention of the individual hospitals concerned. A position involving active service in one hospital ought to be sufficient for a physician and it is wiser for his attention to be concentrated on this institution than to be divided among several. Multiple membership, therefore, with the exceptions noted, should be discouraged.

In connection with Western Reserve Medical School, the following figures are of interest. 331 of the 1,169 listed physicians in Cleveland are graduates of Western Reserve University Medical School—28.3 per cent. of the total. Of the 309 staff positions in the hospitals and dispensaries of Cleveland, 75, or 24.2 per cent. are held by graduates of Western Reserve University Medical School. It will be seen that the proportionate number of positions held by graduates of this medical school is somewhat smaller than the number of graduates of the school among the medical profession as a whole. It should be added that in the hospital and dispensary positions 31 in addition to the 75 just named, are held by members of the medical school faculty who are themselves graduates of other schools. This gives a total of only 106 out of the 309 hospital and dispensary staff positions which are held by graduates or members of the faculty of Western Reserve Medical School.

In connection with the so-called "democratizing" of hospital facilities in the medical profession, it should be pointed out that no hospital can be satisfactorily managed without a definite official staff. A medical boarding house, as previously defined, is merely a nursing home in which physicians treat private patients. Any hospital which endeavors to maintain a medical organization, equipment, and personnel, for diagnosis and treatment, must have some medical authority appointed, to be responsible to its managing body. A number of the proprietary hospitals are maintained by one or more physicians who conduct them as their own enterprises, and who are medically as well as financially responsible. The public service hospital with a board of trustees or other disinterested governing body, must appoint an official attending staff. The functions of this staff are not only the care of patients, including such patients as are admitted specifically as private patients of on-staff physicians. Its functions also include the determination and maintenance of the standards of medical practice which shall be observed in the institution. A medical staff of a hospital should not be merely a group of individuals each of whom has a certain ward or number of beds under his charge, for a year or part of a year, but it is or should be an organization—a group of physicians representing different branches of medicine and surgery, organized for the joint practice of medicine with the equipment and facilities provided by the hospital, defining and maintaining the professional standards and policies which shall be effective throughout the institution.

In some hospitals the medical staff does not fulfill these functions adequately. It does not set clearly defined standards which govern the practice of physicians in the institution. Thus in the matter of record keeping, there are a number of hospitals in which fairly accurate and complete records are kept upon ward patients, showing that physical examination was made, laboratory tests performed, and that careful notes were entered at the time of operation or during the course of the patient's treatment. In the same institution, the records of the private patients of physicians may be limited to identifying or financial data, and have almost no medical information of significance. Such a hospital has not maintained (so far as the records show) the same standard of care for private patients as for part-pay or free patients, who come under the charge of the hospital's attending staff without remuneration. Records are not always a complete index of the degree of care actually provided, yet there can be no doubt that particularly in the matter of laboratory tests and consultation with specialists, part-pay and free cases in many hospitals receive more thorough study than do many private patients. Greater privacy and more intimate personal relation of the patient to the family physician are maintained for the private case as a possible counter-balance.

In proportion as the general public and trustees of hospitals appreciate that a modern hospital should not be a medical boarding house in whole or part, but a medical organization in which the best resources which the hospital has to offer in equipment or personnel should be made available for every patient in so far as he needs them, hospital organizations and hospital procedures will be uniform for all classes of patients, private, part-pay, and free. Patients and physicians alike will profit by such a policy.

With these principles in mind, there have been appended to this chapter certain details which supplement the general principles of hospital organization stated in the section on Organization for Service.

The organization of the medical executive committee is for the purpose (a) of providing the medical staff with a small group which will enable it to conduct the routine business of its organization, formulate hospital standards and policies, and make arrangements for the monthly staff meetings; and (b) of providing a group for regular conferences with the superintendent of the hospital, and, from time to time, conferences with representatives of the board of trustees, to assist in administering the hospital satisfactorily.

The provision of an auxiliary staff is believed important, particularly in view of conditions such as those of Cleveland. It is highly desirable that the number of physicians having some connection with hospital staffs should be increased. On the other hand, it is essential that active attending staff of every hospital be not so large, in proportion to the number of beds, as to be unwieldy or incoherent. Otherwise standards of service are likely to suffer. The organization of an auxiliary staff provides a means of recognizing in a definite way physicians who are utilizing the institution for their private patients or for consultation purposes, and for giving such physicians a definite channel through their delegates whereby they can express themselves to the official staff or to the hospital trustees.

Beyond such machinery of organization, other means exist for opening the facilities of Cleveland hospitals and dispensaries to a larger proportion of the medical profession. It is not only in connection with the surgical operation upon a patient, but also in the medical treatment of acute cases that physicians need the advantages of the diagnostic equipment of hospitals and dispensaries, and of the skill of specialists on their staffs. The laboratory, the X-Ray department and other diagnostic equipment, and the service of specialists need to be utilized by the private physician in behalf of his patient. To make the splendid equipment and personnel of Cleveland hospitals available for diagnostic purposes to the medical profession of Cleveland on a large scale is one of the chief goals to be sought for. This must be worked out in practice largely through the increase of dispensary service in the form of diagnostic clinics, to be available for consultation purposes for non-staff physicians. More detailed reference to this is made in the succeeding chapters on dispensaries.

The enlargement of dispensary service which Cleveland so greatly needs would provide opportunity for a considerable number of physicians to come into close contact with hospital work, as dispensary staffs should be organized in intimate relation with hospital staffs. (See page 846.) The medical advantages of facilities for diagnosis, of consultation, and in general of intimate contact and co-working with other progressive physicians could be opened to a very large number of physicians not now on the staffs of Cleveland medical institutions. The approximate proportion of physicians connected with hospitals and dispensaries in Cleveland ought surely not to be less than in New York (about 50 per cent.) which would mean the addition of 200 or 250 physicians to the staffs. If dispensary service in Cleveland

developed as it should be during the next few years, this result may be measurably achieved.

There are certain groups in the medical profession who feel that their opportunities in the medical institutions of the city are specially limited.

Interviews with a number of foreign-born physicians revealed a considerable feeling that they "hadn't had a chance." A list of 63 foreign-born physicians in Cleveland, furnished by one of the organizations interested in immigrants, is probably considerably less than the actual number. Many of these physicians have a large practice among groups of immigrants and their children, who constitute a considerable proportion of the population of Cleveland. Only nine of these 63 physicians were found to be on the lists of any of the hospital staffs. The foreign-born physicians of the more recent groups of immigrants, such as the Slavic and Italian peoples, are practically unrepresented. It may be felt by many that such a condition will tend to take care of itself with time. However, the unstimulated movement of "time" is too slow. A definite effort should be made to give recognition on hospital or dispensary staffs to physicians of good standing who are of foreign birth or descent, particularly in institutions which number among their patients large numbers of the foreign-born. As has appeared in the section discussing "The Human Problem of the Hospital Patient," (pages 849-857), a number of the hospitals fall into this group. There is unusual value in dispensary service rendered by well-selected physicians of this type.

Physicians of the Negro race constitute a small but definite group whose opportunities to work in medical institutions of Cleveland have been greatly restricted. There are said to be 19 Negro physicians in Cleveland. One of these men is on the dispensary staff of Lakeside Hospital. Representations made to the Survey by physicians and laymen of standing among the colored people of Cleveland are to the effect that the negro physicians and the negro people feel the deprivation brought about by lack of membership on the staffs of hospitals and dispensaries. The problem can be dealt with only in one way, by determining that appointments shall be based solely upon merit. It is a fine testimony to the spirit and policy of the hospitals of Cleveland that so far as negro patients are concerned, there has been absolutely no complaint by the Negroes about discrimination. The establishment of a special hospital for colored people is believed to be unnecessary and undesirable.

Perhaps the most important relation of hospital and dispensary to the medical profession is their educational function. The hospital and dispensary represent to the physician an opportunity to raise the practice of medicine to a higher power because they bring under his command the use of equipment, the organized professional skill of specialists, and technical assistance such as are very rarely available in private practice, and then only to the rich.

The educational function of the hospital and dispensary is only in part exercised through medical schools. The teaching of a medical school like that of Western Reserve University depends in a large measure upon the

hospitals and dispensaries which are affiliated with the school. Undergraduate teaching is and in general can most advantageously be limited to a few selected hospitals. The development of post-graduate instruction under the medical school in the general and special branches should proceed at a rapid rate in the near future, and should involve the use of a considerable additional number of hospitals and clinics.

The actual value of the hospital as a place of advancing medical science and of the skill of the local profession depends of course largely upon the use made of the advantages offered. Decidedly one of the most important means of self-criticism which a member of a hospital staff can have is the autopsy. Definite knowledge concerning the disease which caused the death of a patient can very frequently be obtained by autopsy as in no other way. It is disappointing to find that according to reports received by the Hospital Council during the year 1919, only 456 autopsies were performed. Reports from some hospitals were a little indefinite, and the true number might have been slightly larger. The figures and details are shown in the following table.

AUTOPSIES PERFORMED IN 1919 IN CERTAIN HOSPITALS

City.....(approximately) 209	Mt. Sinai..... 50
Fairview..... 0	Provident..... 0
Glenville..... 1	St. Alexis.....number unknown
Grace.....number unknown	St. Ann's..... 20
Huron Road..... 5	St. Clair..... 1
Lakeside.....110	St. John's..... 20.
Lakewood.....number unknown	St. Luke's..... 5
Lutheran..... 0	St. Vincent's..... 27
Maternity..... 8	Woman's..... 0
Total..... 456	

Such a low percentage can only mean one of two things—either failure on the part of the medical staff to appreciate the importance of autopsies, as a real checking up of results, and setting a real standard of self-criticism and self-improvement, or on the other hand, a lamentable deficiency in administration, in failing to endeavor, in each case of death, to secure if possible consent for autopsy from the family of the patient. Experience in many hospitals in other communities shows that it is necessary to fix responsibility upon some definite person for each branch of service, usually on the senior resident or interne, for securing permission. Compliance with the spirit as well as with the form of the standards of the American College of Surgeons demands that the medical profession for its own sake show better results in the future in securing autopsies in the hospitals of Cleveland. It is recognized that the public needs education to understand the great value of autopsies, not only for the physician, but in the long run to improve the treatment of every patient.

is particularly interesting to observe that the three teaching hospitals (City, Lakeside, and St. Vincent's), together with Mount Sinai, show autopsies out of a total of 456. Taking these four hospitals, the number of autopsies compared with the number of deaths is shown in the following table. It will be observed that the best showing made is of only about 34 per cent of deaths autopsied, and that the average even of these hospitals is only 23.3 per cent.

AUTOPSIES AND DEATHS, COMPARED, 1919, IN FOUR HOSPITALS

	Autopsies	Deaths	Percentage of autopsies to deaths
City.....	209	861	24.3
Lakeside.....	110	320	34.4
St. Sinai.....	50	188	27.1
St. Vincent's.....	27	331	8.2
	-----	-----	-----
Totals.....	396	1,700	23.3

and the formal courses recognized as such under the medical school, the broader educational function of the hospital and dispensary can be fulfilled. Monthly staff meetings for the discussion of cases, of hospital statistics, and of the result of operation or treatment, are the means whereby the physician and the hospital are stimulated, and the service of the institution is advanced. The participation of an auxiliary could be of much educational value. The daily contact of physicians with one another in the clinics of the dispensary and in the wards is a less but no less effective means for development of knowledge and skill. The opening of facilities for diagnostic service to the physicians of the community on a broad scale, through diagnostic clinics, and larger provision for treatment of private patients, should serve to render the medical functions of the hospitals and dispensaries effective over a much longer range and to a more profound degree.

MEDICAL STAFF ORGANIZATION*

- (a) The members of the Medical Executive Committee should include the chiefs or representatives of the division of medicine and surgery, one or more representatives of the specialties, and a representative from the assistants or junior members of the staff.
- (b) The Medical Staff should establish standards of hospital practice in all departments, including laboratories, X-Ray department, etc. All Medical Staffs should take official action by resolution or pledge in the matter of fee splitting. No member of the Medical Staff should hold membership on the Board of Trustees. Privately organized hospitals with

W. L. Babcock, M. D. Reference should be made to pages 845-848, to which this is a supplement.

Boards of Trustees consisting of medical men should reorganize by arranging for the appointment of a lay Board of Trustees, the physicians interested in the hospital organizing into an Attending Staff. The senior Attending Staff physicians should hold active staff membership in one hospital only. This restriction should not apply to members of the staff engaged in university teaching, or to specialists with limited services, or in small hospitals to clinical assistants.

(c) The following additional committees will often be found useful:

Library Committee.

Resident House Staff Committee.

Hospital Records or Program Committees.

(d) Provisions should be made for the recognition of non-staff physicians by permitting the use of a limited number of hospital beds under the general supervision of the Chief of the Medical Staff through Chiefs of Departments. It should be recognized that the so-called open hospital is a powerful factor in preventive medicine, a post-graduate school for the general practitioner, and a great influence towards his professional elevation. The practice of non-staff physicians in hospitals should be regulated, scrutinized and carefully supervised by the Executive Committee.

(e) The stand taken by the Cleveland Hospital Council to the effect that all hospital bills should be paid before the Attending Physician or Surgeon collects his bill is to be commended and should be made a rule in every hospital.

(f) At least ten staff meetings should be held annually, at monthly intervals, excluding July and August. As many more may be called as are deemed necessary. The Executive Committee should meet monthly or oftener. Regular Staff Meetings should be 90 per cent. clinical. Routine business should be abbreviated and parliamentary discussions avoided, except on important matters of staff or hospital policies. Provision should be made by the Record Committee, or otherwise, for review of clinical records. Reports of unusual or interesting cases should be presented for group discussion, together with results of original research work carried out by individual members of the staff, or the hospital laboratories. It is also desirable that arrangements be made to serve light refreshments after these staff meetings, which must, of necessity, be held in the evening. It has been shown in at least one instance where this program has been carried out for years that the percentage of staff attendance has averaged 75 to 80 per cent.

of staff membership and has exceeded, by several hundred per cent., the attendance at regular meetings of the County Medical Society. Attention is called to the recommendations of the American College of Surgeons as to program for staff meetings. The Associate, Auxiliary and Resident Staffs should meet with the Attending Staff at their monthly clinical meetings.

FINANCES AND ADMINISTRATION

To maintain the 21 institutions which are members of the Cleveland Hospital Council cost nearly three million dollars during 1919. About 97 per cent. of this was for hospital care and $2\frac{1}{2}$ to 3 per cent. for dispensary service.* This \$3,000,000 represents about 700,000 days of hospital care given, and 120,000 dispensary visits. It represents service to probably 80,000 different individuals. In other words, these hospitals and dispensaries care for one person out of every twelve in the population of greater Cleveland, and cost about \$3.07 for each member of the population. Only a fraction of this cost, however, is a net charge upon the community, for as the third column of Table VI. indicates, the operations of the institutions yielded a very considerable portion of the necessary income.

Over two-thirds, in fact, of the expense of the non-municipal hospitals is repaid by fees from patients and by other earnings. The other third, or between \$600,000 and \$650,000, has to be provided by interest on endowments, by legacies and gifts from the public. Taxation must provide for the municipal institutions to approximately the same amount. It will be observed that in these figures relating earnings to expenditure, only the non-municipal hospitals are considered. While there are some earnings in the municipal institutions, they cannot fairly be compared with the other hospitals in this respect.

The non-municipal hospitals bring upon the public an annual charge of approximately \$460,000, after deducting from the total expense the earnings from patients and the amount available from endowments of various sorts. This figure is the estimate for the year 1920, as presented to the public in the Community Chest campaign of November, 1919. The City Hospital, together with Warrensville Tuberculosis Sanatorium, required in 1919 an appropriation of \$625,656.92 from taxation. Adding together the cost for the municipal and the non-municipal hospitals, we find that \$1,086,000 is the approximate amount required to maintain the hospitals and dispensaries of Cleveland, in annual contributions by the public or "voluntary" taxation, taken together with legal or compulsory taxation. This is about \$1.30 for every man, woman, and child in the city of Cleveland, or about \$1.10 per head if the larger metropolitan area which these hospitals serve is taken into consideration.

Parenthetically, it should be noted that these figures do not include the cost of the dispensary "Health Centers" maintained by the Division of Health, the cost of the city physicians who care for the sick in their homes, or any of the other expenses of the Division of Health. In the main, the bulk of these vast sums goes for the care of sickness. The total amount expended for education in hygiene and for the prevention of disease is only a fraction of this amount, the expenditure for the Division of Health being less than 50 cents per capita. Expenditures for hospitals are necessary

*The cost of the dispensaries is not accurately stated in several of the hospital reports, and the above figure is therefore an estimate, merely.

and desirable under present conditions, but one may look forward to a day when the proportion between the expenditure to cure illness and expenditure for prevention will not be so heavily weighted against the preventive measures.

The cost of hospital service is more accurately expressed in terms of the unit previously defined; namely: average cost per day of care. As will be seen at the foot of Table VI., this average cost for a large group of the non-municipal hospitals was approximately \$4.39 in 1919.

Hospitals have felt keenly the high cost of living, more heavily in fact than most institutions, because of the large proportion of their expenditure which goes for food, drugs, and supplies of all kinds, which have especially increased in price during the past few years. The public has not appreciated how expensive good hospital service must now be.

When individual hospitals are compared, the average cost stated in their reports for the year 1919 varied from \$2.00 to \$5.62. This range is doubtless too wide, in that it is not believed the lower rate is a true representation of the cost of any hospital. Accounting systems have not always been designed so as to charge to annual maintenance all the items which should properly be so entered. It is not believed at the present time that any member of the Hospital Council is maintaining service at a rate less than \$3.00 per diem, and this figure is too low to render adequate service under present conditions. A general hospital properly equipped should expect a per capita cost of fully \$4.00 per diem. When a hospital is rendering an unusual grade of service or is conducting medical teaching or research, a cost of \$5.00 a day need not excite objection.

In general, the average cost of a day's care, or the so-called "hospital per capita," must be used with great caution as a basis for either commendation or criticism. It must be known how the per capita cost is made up—whether for instance a low per capita is due to undue crowding, whether a high per capita has been due to a small number of bed days care given because of temporary lack of demand or enforced closing of certain wards or rooms, or whether a high per capita is due to unusual quality of service, or on the other hand to uneconomical administration, or again whether a low figure may be accounted for by careful, economical administration, or else by the lack of the proper facilities.

As a rule, many different elements must be known and considered before forming any judgment as to the significance of a given per capita cost. The average for the city as a whole is of considerable general interest, particularly in view of the need to call public attention to the expensiveness of modern hospital service. The fact that hospitals have been generally charging ward rates (at least until very recently) as low as \$2.00 per diem is a little misleading. The average person has somehow taken for granted that if a patient paid the so-called ward rate, the hospital's cost was met. This is far from the truth. Ward rates have generally been put far below cost, and in recent years, most of the hospitals of Cleveland have failed to raise ward rates to correspond with the increase in expense. This has been

due in considerable measure to a desire not to levy a tax upon the sick and suffering, or to make known rates which might keep needy patients from the hospital doors.

Time was when hospitals were thought of as charities for the destitute, but at the present time, hospitals are public services receiving the well-to-do and middle classes as well as the poor, in varying proportions. The general public should be brought to the point of understanding that hospital service ought to be paid for at its cost by those who are able to pay, and that room and ward rates should be adjusted with respect to cost of service. Considering the fact that a hospital of the public service class often has an endowment, it should be expected that the income from the endowment will go to help make up the difference between the cost of service and the earnings from operation. A deficiency will be due partly to the fact that the ward rates are put at less than cost, and partly to the fact that many patients should be and are accepted who cannot pay even these rates.

As a general principle, ward rates ought to be fixed somewhat below the cost of service, but not very much below. It is believed wise that at the present time the hospitals of Cleveland should not announce rates for ward service at less than \$3.00, and in many hospitals or in some divisions thereof, ward rates may be \$3.50 a day. The naming of these rates in no case should imply that patients unable to pay them in part or able to pay nothing should be refused admission. A hospital cannot expect financial support from the public unless it makes the patient's need and not the patient's means the basis on which service is offered and rendered.

In the following section of this Chapter (pages 877-889) Dr. W. L. Babcock has outlined a large number of highly practical suggestions and recommendations regarding administration. Many of these relate to finances. It is only fair to point out that the Cleveland Hospital and Health Survey, despite evident eagerness on the part of all members of the Hospital Council to cooperate, found it no easy matter to secure many of the fundamental financial and statistical figures from a number of hospitals. There was nowhere lack of willingness, but the accounts had not been kept with a view to critical self-analysis.

Methods of hospital cost accounting have been pretty thoroughly worked out during recent years. Many smaller hospitals feel that they cannot readily maintain the trained book-keeping staff to carry out a cost accounting system. The extra time required by such a system and the extra expense involved seem too much, and the hospital is likely to go without. In the long run, good cost accounting is a money saving enterprise. It points the way to more economies than its own maintenance costs. It also helps in fixing rates so that they bear proper relation to cost, and tends to increase income where income needs to be increased.

The needs of the smaller hospitals can be met only by some cooperative enterprise. The Welfare Federation should establish an expert accountant service, available to any of the Cleveland Hospital Council members, for

service in the administration of proper accounting systems and for advice periodically or whenever necessary in its maintenance. Such a plan would make available to all hospitals a grade of accountant service which few if any could afford to maintain alone. The plan would have the further great advantage of enabling uniform financial reports to be periodically rendered to the individual boards of trustees, to the central budget-making authorities of the Welfare Federation and to the public, which in the long run foots the bills.

In matters of financial as well as medical service, trustees need to determine exactly what figures they need to have presented to them in their annual or monthly reports, in order that they shall know all they need to know regarding the work of the hospital. The central accounting system proposed would be of great constructive value to every board of trustees, not only in furnishing information, but in helping them to see what information they need to have furnished. An X-Ray department, for instance, is very expensive to maintain in terms of gross expense, but in many hospitals a considerable proportion of the X-Ray work is for patients who can pay a fair fee, so that the net expense of maintaining the department is not large. In a hospital doing a large proportion of its work for patients who can pay few if any fees, conditions are different, but in any hospital, proper accounting will show just what the X-Ray department costs, just what ratio the income derived from it in its different classes of work bears to the expense hereof, and the trustees will be able to judge at the end of a month or a year how much net charge this service brings according to the character of work and service rendered, and the rates which patients can reasonably be expected to pay.

Perhaps the most fundamental need for trustees is to appreciate that hospitals are public services in the broad sense of the word. Two more or less opposite conceptions have dominated hospitals: (1) that represented in its extreme form by the proprietary hospital treating private patients where financial return from the patient is largely used in determining his acceptability, (2) the charitable corporation in the old sense of the term, according to which hospitals are regarded as rendering benefits to the helpless who neither can or should be expected to make any financial return. At these two extremes we would find hospitals serving private patients only, and hospitals serving only the poverty stricken and the destitute. The outstanding development in the relation of hospitals to the community during the last decade or so has been the increase in hospital demand by persons of the middle classes, the self-supporting families of moderate means in fairly comfortable financial condition but with no large property holdings and no large annual margin of income over expenditure. These so-called middle classes are more and more finding that it is better to go to the hospital than to be treated at home in serious illness, surgical operation, or for maternity care.

Much testimony has been received in Cleveland that there is great demand for beds for these middle classes. Beds are demanded in private rooms or more particularly in two to four-bed rooms or small wards, where fees

will be moderate and service excellent but not of what may be called the exclusive type.

The hospitals of Cleveland face such large financial obligations in view of the high cost of living that much anxiety has been felt by many trustees in looking forward to the future. Generous public support for the hospitals through the Community Fund or in other ways is indeed necessary, but the enlargement of the hospital facilities of Cleveland, particularly in providing more fully for the middle classes, will assist the hospitals financially by rendering a larger proportion of their services of a self-supporting nature, and thus help in carrying a general overhead which in itself is a very considerable part of modern hospital expenditure.

The Cleveland Hospital Council is to be congratulated for having recently secured from the Industrial Commission of Ohio, a more satisfactory recognition of the hospital's service to industrial accident cases. In Ohio, as in many other states, the establishment of workmen's compensation took place without adequate recognition of the large part that hospitals and dispensaries would need to play in its successful administration. Industries and insurance companies found that prompt and competent medical assistance to men who had met with industrial accidents was not only humane but was good business. The promptest possible return of the employe to his work stops the weekly payments and saves more money than it costs. There are no theoretical or practical reasons why hospitals which are supported by the community as public service enterprises should render any service to industry for less than the service costs, when under the very foundation principles of workmen's compensation, the industry is supposed to be paying the full amount of the bill for industrial accidents.*

Hospitals supported by the community must necessarily receive and care for many patients who are properly public charges of the city or county or of some other county. It is fair and desirable that hospitals be reimbursed for the care given patients who are proper charges upon the public. Since the city of Cleveland maintains its own hospital, the City Hospital is naturally the first place to which such patients should be sent, but because of emergency or other reasons, other hospitals will necessarily receive cases which are charges upon the city or county. The law as recently amended renders it proper for the Commissioners of Cuyahoga County to reimburse institutions furnishing care to persons who are public charges.† It is believed that the following principles should govern the administration of this provision:

1. A policy of paying privately owned and supported institutions for services such as the care of the dependent sick, which is a public function and a means of preventing disease and dependency, instead of providing adequate, publicly owned and operated hospitals out of the general tax rate of the city, is essentially unsound and should be condemned as

*Through the efforts of the Hospital Council the State Commission adopted the principle of "hospital cost for service rendered" on July 1, 1920.

†The Hospital Council has already negotiated with the County Commissioners on this subject and negotiations are encouraging.

ffering temptations to the political use of public monies, and as contrary to the spirit of municipal government.

2. Notable instances of abuse of the practice of subsidizing private hospitals and other privately owned institutions are to be found in the recent history of the state of Pennsylvania. In certain cities, however, notably Detroit, Michigan, and New York City, payment to private institutions for the care of public charges has served a useful purpose and has been honestly administered.

3. Only as a temporary expedient and under strict and exact determination of the quality and quantity of services rendered for which payment is made can such a practice be approved for the city of Cleveland.

4. With the city definitely committed to the construction and maintenance of a modern City Hospital, the facilities now under consideration and agreed to by the private hospitals can confidently be expected, if carried out, to offer relief for approximately the next twenty years on the basis of the estimated growth of Cleveland.

5. Without urging the point to the extent of asking for any public declaration or commitment by the Hospital Council to a policy, it is thought by the Survey that agreement should be reached by the hospitals in the Hospital Council to apply funds for the extension of their facilities for part-pay patients equal in amount to the sums received in the year from the County Commissioners. It is particularly the responsibility and privilege of the privately owned hospitals to meet the need of the patient of modest means who expects to pay part, if not the whole cost of hospital care. County payments for the care of the dependent sick should be a resource for increasing part-pay bed capacity and should not be accepted merely as a relief from the burden of raising funds for meeting current expenses.

6. With the understanding that the full influence of the Hospital Council collectively and through its component institutions will be used to accomplish the two objects mentioned in 4 and 5 above, and in the belief that the necessity for County payments to private hospitals should cease when adequate provision for the dependent sick is made in publicly owned and operated hospital or hospitals, the Survey endorses the proposed system of contracts with the County Commissioners under the following conditions: namely, that payments by the County Commissioners to hospitals with which they make contracts shall be made only for services of an approved quality, provided for a definite period of time and for specified individual patients who have been shown to be entitled to public relief after investigation of their home or economic condition by representatives acting under the orders of the County Commissioners.

7. Inasmuch as the County Commissioners cannot, without amendment of state laws, employ from public funds investigators to ascertain the quality of services given to patients or to verify claims of hospitals and patients that such and such individuals are proper objects of public assistance, it is suggested that the Hospital Council request the Community Fund to put at the disposal of the Welfare Federation such amount from the unassigned funds as may be needed (tentatively estimated as \$5,000) to employ trained social investigators to be put at the disposal of the County Commissioners for the purpose above described.

8. It is suggested that the Hospital Council bind its members by mutual agreement to enter into contract with the County Commissioners only on the basis of the conditions suggested in 6.

The hospitals of Cleveland are in a fortunate position compared with those of most cities, because of joint financing through the Community Fund. The needs of many institutions are brought before the public at a single time in a forceful impressive way. Mutual relationship among hospitals and a better understanding of the broad needs of the community are certainly promoted also. None the less does the work of each hospital need interpretation to the public which supports it financially. There is indeed a more definite demand for accurate and comprehensive financial reports under such a system as exists in Cleveland, since the central financial and appropriating committees of the Welfare Federation are in a position to scrutinize the financial reports of each hospital much more closely than the average contributor will in communities wherein each hospital raises its funds independently. An added stimulus is thus applied toward economy and toward careful financial and book-keeping systems. All the more do the hospitals of Cleveland, particularly the smaller ones, need expert accountant service to enable them to work out their book-keeping and their financial reports in the best way.

The Purchasing Bureau of the Cleveland Hospital Council is a distinct and notable achievement, indicative of the spirit of cooperation in community enterprises which is characteristic of Cleveland. Through the Purchasing Bureau more economical and satisfactory buying of standard hospital supplies is made possible. Each member of the Council is thus provided with the services of an expert in buying, who is devoting his entire time to studying markets, making contracts and assisting the hospitals to get the best and the most for their money. It is to be regretted that the use of the Bureau by a number of hospitals has not been as large as it should be. If the purchases of the hospital for all kinds of supplies be taken, and the amount of purchases made in 1919 through the Purchasing Bureau, be expressed as a percentage of this, we have a certain index of the degree to which the hospital has taken advantage of this measure of economy. It is found that the percentages of utilization by the different hospitals were as given in the following table:

OPORTIONATE USE OF THE CENTRAL PURCHASING BUREAU OF THE CLEVELAND HOSPITAL COUNCIL

Hospital	Proportion of Maximum* Purchasing Possibility
Cleveland Maternity.....	2/3
Fairview Park.....	Less than 1/3
Glenville.....	Approximately 4/7
Grace.....	1/6
Huron Road.....	1/8
Lakeside.....	Maximum
Lakewood.....	1/13
Lutheran.....	1/25
Mount Sinai.....	Less than 1/3
Provident.....	1/12
St. Alexis.....	1/20
St. Ann's.....	3/8
St. Clair.....	1/5
St. John's.....	1/5
St. Luke's.....	About 1/4
St. Vincent's.....	1/17
Woman's.....	Approximately 1/5

Most hospitals find it convenient to make some purchases independently m time to time, because of the unusual character of the article to be ight or because of the haste with which it must be secured, but given ciency on the part of the Purchasing Bureau, these objections should be luced to a minimum. Furthermore, it is obvious that the more fully the reau is utilized, the larger will be its purchasing power and the better ms it can make. Doctor Babcock's recommendations regarding the reau (pages 882-885) are very pertinent and practical.

In this as in helping the hospitals to save money by getting the largest counts for cash (page 879—section on "Practical Matters of Ad-nistration") the Welfare Federation is in a position to make the money ntributed by the public go further than it now does.

Hospitals are likely to benefit by taking advantage of every opportunity expert assistance in any of their many special lines of activity. The hool of Pharmacy of Western Reserve University, for instance, is in a sition to offer assistance to the hospitals of Cleveland that would be of at benefit in two ways: enabling the hospital to render a higher type of

*In 1919 Lakeside Hospital made practically all of its purchases, amounting to exactly one-third of operating expenses, through the Central Purchasing Bureau of the Cleveland Hospital Council. That re has therefore been adopted as the maximum purchase percentage, and the purchases of other hos- ls have been figured on this basis.

service to the public, and lowering the cost of medicines to the hospitals. For a description of the proposed service, see the section on Pharmacy, in Part VIII. Such a plan would take at least a year to perfect, but its value to hospital service should be self-evident.

Hospital financing and hospital administration have become technical matters. At best, the average layman is not concerned with or even interested in their details. It is of the greatest importance, however, that the hospitals of Cleveland shall not lose their individuality because of joint relations through the Welfare Federation and the Cleveland Hospital Council, and that the work of each hospital as well as of all hospitals taken together shall be properly understood by the public. To take technical reports of income, expenditure, and service rendered, as prepared by the hospital for the use of its trustees, the Cleveland Hospital Council, and the Welfare Federation, and to utilize these reports as the basis of an account of hospital work in which the whole community will be interested, is the duty of a "publicity man." The publicity men and the Welfare Federation which provides publicity service, should constantly bear in mind that the public needs to be helped not only to understand what hospitals do, but that their work is costly and why this is so. Comparisons of the present cost of hospital care with the cost in former years will be useful if so presented as to bring home to the reader that the added cost is not only because of higher price levels, but means also a higher quality of service. The business man who thinks in terms of dollars and cents needs to be made to see why the medical boarding house type of institution has a lower cost, and why such low cost is not as good a thing for the community as a hospital costing fifty per cent. more per capita but run as a modern hospital with adequate medical, nursing, and social service facilities for diagnosis and treatment. The public must learn that health can be bought at a price and that the price is worth paying.

SOME PRACTICAL MATTERS OF ADMINISTRATION

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In making these statements and recommendations on General Administration, it is recognized that the Cleveland Hospital Council has had many of them under consideration and in certain instances has actually had committees at work in standardization of supplies, uniform records, accounting, uniform rates, etc. In its contact with the administrative departments of the hospitals within the Council, the Cleveland Hospital Council has developed a working organization of great practical benefit to its members. The projects under consideration by its various committees, as well as the recommendations herein, are practical and logical steps in the development of economical administration and efficiency. The Council would be of little benefit to its membership unless it adopted standards that would tend to lift the level of the hospitals to an efficient average. The Council can be of the greatest benefit if it leads, plans and organizes in advance of the hospitals.

FINANCIAL

1. FINANCIAL AND OFFICE RECORDS, BOOKKEEPING, ETC.—The Cleveland Hospital Council has unified and standardized the financial and statistical reports of its constituent hospitals. The bookkeeping systems, forming the basis of these reports, which are rendered monthly, have not been standardized in the various hospitals. It is recommended that the bookkeeping forms and headings used by the various hospitals be made uniform. This is particularly necessary for cash blotters, and voucher registers, in order to show similarity in distribution of earnings and expenses.

The records furnished the Cleveland Hospital Council relating to per capita cost in some of the hospitals have been fallacious from the beginning for the reason that many of the extraordinary expenses of some of the hospitals have been charged to special funds and not to maintenance accounts. In several of the smaller hospitals record of receipts and expenditures only is maintained. No attempt has been made by these hospitals to credit or debit the various departments of the hospitals with their earnings or expenses. The per capita costs reported by Cleveland hospitals for 1919 varied from \$2.00 to \$5.62 per day. In order to determine wherein this difference may be found, it is necessary to check earnings and expenses by departments, such as training school, laundry, housekeeping, building maintenance and current repairs, administration, professional care of patients, etc. The latter should be subdivided into its natural subdivisions, such as laboratory, X-Ray department, surgical department, house staff, etc.

2. ACCOUNTING—The monthly and annual accounting for all hospitals should be made by an accountant under the direction of the Welfare Federa-

tion. It may be feasible for the latter organization to maintain the services of a paid accountant staff who could carry on a month-to-month audit in all hospitals within the Federation and furnish each Board of Trustees with a monthly and annual accounting statement. If the recommendations set forth in paragraph 1 are carried out in all of the hospitals, it will simplify the audit and accounting to a great extent. If a uniform system of financial records and bookkeeping is established for each of the hospitals in the Council, the time devoted by auditors on the books of some of the hospitals could be reduced 50 per cent. or more. It should be stated here that the Welfare Federation has provided for these audits heretofore through a firm of auditors. It is understood that the Cleveland Hospital Council is endeavoring to secure a uniform system of accounting for all hospitals in the Council.

3. STATEMENT OF EARNINGS—The monthly and annual statements of earnings of hospitals should be based on cash receipts only. Unpaid personal accounts of hospitals have no place in a statement of earnings. The present earnings and income reported to the Cleveland Hospital Council and Welfare Federation from the various hospitals are not comparable for the reason that some hospitals base their statements on cash receipts only, while others include unpaid personal accounts in their statement of earnings. (Note A.)

Note A—The practice of many hospitals in carrying unpaid personal accounts on their balance sheet as an asset is misleading, fallacious and wrong in principle. A varying percentage of most of these accounts are uncollectible because they are largely accounts of part-pay patients. If the statement of earnings includes cash receipts only, such open accounts as are paid after the patient leaves the hospital will appear in the statement of the month during which they are paid. It is impossible to estimate the percentage of unpaid hospital accounts that are uncollectible. The good accounts are usually paid within a few days, while the great majority of the remainder are uncollectible.

4. APPRAISAL OF PROPERTY—An appraisal of the physical property, buildings and equipment, should be made of all Cleveland hospitals on a basis of present values. The reproduction cost of hospital buildings at the present time is in some instances at least 100 per cent. higher than five years ago. A proper percentage for annual depreciation cannot be established without an appraisal. It is also necessary in order to determine valuation for fire insurance, etc. It is possible that the expense of an appraisal could be lessened if the Cleveland Hospital Council made a contract for all the hospitals represented in the Council. The expense could then be prorated between the hospitals according to property values.

5. DEPRECIATION—Depreciation of buildings and equipment should be charged off annually. The bookkeeping system recommended in paragraph one should provide for an annual depreciation charge.

6. PER CAPITA COST—All expenditures for current repairs, new equipment, replacement of equipment and betterments to existing buildings

should be charged to maintenance account. The per capita per diem cost of maintenance will thereby be placed on a uniform basis for all hospitals. Expenditures for new buildings, and equipment for new buildings, should be charged to capital expenditures. (Note B.)

Note B—The per capita cost per diem for maintenance has been reported for Cleveland hospitals as follows:

(a) For 1918, minimum, \$1.69; maximum, \$4.60

(b) For 1919, minimum, \$2.00; maximum, \$5.62

(Not including Warrensville Infirmary or the City Hospital). It is believed that the minimum per capitas reported do not actually represent the true per capita cost.

7. CASH DISCOUNTS—Cash discounts should be taken on all bills where possible. Experience in hospital accounting has demonstrated that legitimate cash discounts will represent one-half of one per cent. of total expenditures of general hospitals, or two-thirds of one per cent. of total expenditures for maintenance, exclusive of salaries. (Note C.)

Note C—The practice of holding bills for approval of committees of the Board of Trustees or Managers is pernicious and accounts for failure to obtain some cash discounts. The Board of Trustees should put in the hands of hospital superintendents full authority for approving bills for payment of all current expenses. Extraordinary expenditures should be authorized by the Boards of Trustees before order is placed by superintendents. Hospitals which habitually pay bills after 30, 60 or 90 days cannot purchase to good advantage in the open market, and have a poor credit rating. It may be necessary for the Cleveland Hospital Council to establish a fund to cover the discounting of bills for smaller hospitals.

8. RATE FOR WARDS AND ROOMS—Ward rates are ridiculously low, averaging \$2.00 per day. These rates should be raised to at least \$3.00 per day, which figure represents only part cost of maintenance. Private room rates in some hospitals are also low and should be advanced. Board bills for ward and room beds should be collected one week in advance for general cases, and two weeks in advance for maternity cases. Therefore, patient's relatives should be billed weekly in advance. Recognition should be given the fact that wages and salaries are materially higher than when these rates were originally established. It should be understood that ward and room rates cover bed, board, pupil nursing, interne service in the larger hospitals, certain routine and diagnostic services, and for free and some part-pay patients, gratuitous medical attendance.

9. RATES—COMPENSATION—The rate formerly allowed by the Ohio State Industrial Commission for compensation cases was outrageously low. Such rates should be established on a basis of cost of maintenance. \$3.00 to \$3.50 per day, plus charges for all extras, will represent the approximate cost of

ward patients, at present. The Cleveland Hospital Council has taken the commendable stand that hospital cost for hospital service should form the basis for the establishing of hospital rates by the State Industrial Commission, and it is gratifying that the Council has recently secured recognition of this principle from the Commission.

10. RATES FOR MUNICIPAL AND COUNTY PATIENTS—The charge for the care of these patients should be based on the average cost of maintenance for the preceding year and be a matter of annual adjustment. It should be based on per capita per diem cost. No hospital should accept a lump sum or subsidy from any municipality, state or county authorities. Contracts should never be made for the care of the sick on the basis of a lump sum annually.

11. EXTRA CHARGE SCHEDULE—A charge schedule for extras should be adopted by all hospitals, and charges made for many supplies and much service that is now rendered free. Few Cleveland hospitals have an adequate extra charge schedule. Hospital clients think nothing of paying for all services rendered at a hotel or elsewhere. Extra charges for supplies or services for part-pay patients can be cancelled or reduced at discretion when patients are unable to pay. The following schedule of charges is suggested:

Blood transfusion for private patients.....	\$50.00
Blood transfusion for ward patients.....	25.00
Large surgical dressings.....	1.00 to \$2.00 each
X-Ray and stereoscopic examinations.....	10.00 to \$40.00
Board of Special Nurses.....	1.50 per day and up
Plaster casts.....	2.00 to \$10.00
Services of hired anesthetist.....	5.00
Nitrous oxide gas and oxygen.....	5.00 per adm. hour
Salvarsan administration.....	5.00 to \$10.00
Proprietary drugs, patent medicines, serums, ampules and special prescriptions.....	Cost plus 10%
Splints and surgical appliances.....	Cost plus 10%
Meals for relatives of patients.....	.75 to \$1.00 each
Cots.....	1.00 each
Ambulance service.....	Cost
First-aid services for out-cases, including dressings.....	5.00 to \$10.00
Operating-room fee.....	10.00
Labor-room fee.....	5.00 to \$10.00
Special nursing	Cost
Laboratory fees for Wassermann, blood, stomach, fecal, spinal fluid examination, etc., for private-room patients.	

CREDIT INVESTIGATOR—(a) Large hospitals should maintain an in- or credit man whose duty it shall be to investigate the financial needs of patients. Many patients are maintained without cost or able to pay part cost; many ward patients are cared for at part cost or able to pay full cost. Ability or disability of ward patients to pay is outlined in the preceding paragraph can be established by this in-. The data accumulated by the Social Service department of hospitals should be available for the use of the office investigator. It is considered suitable for the social service worker or department to employ a financial or credit investigator to protect the business credit of the hospital.

It is recommended that the Cleveland Hospital Council engage a credit investigator to investigate the economic status of undetermined cases in small hospitals. The salary and expense of this investigator can be shared over several hospitals. It is believed that the financial benefit from the employment of such a man would be productive of a definite increase in income to the hospitals. An alternative would be the working out an arrangement with the local credit association.

CLASSIFIED WAGE AND TIME SCHEDULE—The project of the Cleveland Hospital Council, through a committee of Council members, to standardize hospital wages and hours of duty covering certain groups of hospital employees is commendable and should be carried out. It is probable that a variation in scale will be necessary in order to provide for the difference in responsibility, etc., in certain positions in large and small hospitals. It has been shown that wages in hospitals may be standardized in the following departments:

Training School Department—Floor supervisors, ward orderlies, hospital maids.

Housekeeping Department—Waitresses, chamber-maids, pantry maids, cleaners (by the month), housemen and porters.

Laundry Department—Laundresses, washmen and wringermen.

Repair Department—Carpenters, painters, steamfitters and their helpers, wall washers, window cleaners.

Engineering Department—Engineers and firemen.

Ambulance Department—Chauffeurs.

It would not be advisable to extend this classification as to wages and hours to offices, laboratories or professional departments which depend on lists or certain skilled employees.

Due to the difference in the size of kitchens and variety of personnel therein, it is not considered feasible to classify kitchen employees.

14. DISCOUNTS IN ROOM RATES TO PRIVILEGED PERSONS—The majority of hospitals in Cleveland give special rates to members of the staff and their families, to graduate nurses of the hospital and the clergy.

Hospitals with endowments primarily given for the benefit of people of lower economic status, should limit their room rate discounts to persons who give gratuitous service to the hospital. Such discount rate should not be less than the per capita cost of maintenance.

PURCHASING DEPARTMENT

1. CENTRAL PURCHASE BUREAU—The majority of Cleveland Hospitals can utilize the services of the Central Purchase Bureau to greater advantage. Several hospitals especially have neglected their duty and opportunities in taking advantage of the Central Purchasing policy. The Board of Trustees of every Cleveland hospital should satisfy themselves that the hospital under their control takes advantage of this principle to a maximum degree. Their investigation of the subject should include a comparison of prices paid by the Bureau during the last year for like commodities purchased by the superintendent of the hospital during the same period.

Full advantage of a central purchasing bureau will not be manifested until the hospitals standardize supplies.

The replies to questions referring to the efficacy of the purchasing department of the Cleveland Hospital Council, from the standpoint of the hospitals, reveal two chief criticisms:

(a) That delays in the delivery of supplies purchased through the Bureau are frequent.

(b) That prices obtained by the Bureau are in some instances no better than quotations made the hospital direct.

In reference to (a): it may be stated that many delays have occurred during the past year on account of slow freight, insufficient production and causes beyond the control of the Bureau. It is often necessary, in order to obtain the best prices, to purchase supplies out of town that ordinarily would be purchased by the hospital in the city. It is believed that criticisms could be lessened if the hospitals would anticipate their wants further in advance. To meet this criticism, the Bureau should make prompt delivery a requisite for the acceptance of orders, and aim to consider prompt delivery in conjunction with minimum prices.

In reference to (b): it may be stated that the benefits of Bureau purchasing can be increased through larger orders. The nature of many commodities does not enable the central purchasing bureau to obtain a price any lower than might be obtained by the hospital. This fact of itself should not prevent placing orders through the Bureau for most commodities, inasmuch as

The Bureau's chief advantage lies in the placing of large orders. The Bureau could keep hospitals informed of pending advance in prices.

The Cleveland Hospital Council Purchasing Bureau should systematize its Quotation Department so as to furnish without delay quotations that a hospital executive may use in comparison with prices he may have received. To obviate the lost time element, the following should pertain:

- (a) Prompt furnishing of quotations.
- (b) Prompt placing of orders.
- (c) Prompt delivery of goods.

2. **WAREHOUSING BY THE BUREAU**—It is not believed that the full benefits of the Central Bureau purchasing will be manifest until the Cleveland Hospital Council provides warehousing and storage facilities. Investigation shows that many of the smaller hospitals are buying in small quantities, or from hand to mouth, for two reasons:

- (a) Lack of capital requisite for carrying goods in stock.
- (b) Lack of storage facilities.

In view of the cooperative relationship of the hospitals to the Cleveland Hospital Council and the Welfare Federation, the remedy does not wholly lie within the hospitals. Additional storage space cannot be provided in any hospital buildings without definite building additions. Limited earning power of small hospitals precludes the establishment of a fund sufficiently large to carry a stock of goods.

Investigation and study of the cooperative purchasing bureau maintained under the auspices of the Cincinnati Community Union has thrown new light on this subject. The Cincinnati Community Union has set aside a revolving fund of \$50,000 to provide for the expenses, warehousing and stock for the charitable organizations, institutions and hospitals of the city. Though in operation only a few months, the participants in this cooperative bureau are enthusiastic over the results. It is recommended that the Cleveland Hospital Council investigate the possibilities of warehousing to a limited extent in order to encourage greater use of the purchasing possibilities of the bureau. It is believed that if the hospitals of Cleveland can be assured of immediate delivery from warehouses of many staple supplies, their bureau requisitions would be greatly increased. The Cincinnati experiment has shown that the capital tied up in stock at certain times has only represented a fraction of the amount set aside. In fact, it is believed that during certain seasons of the year a part of the money set aside for warehousing stock could be drawing interest or be used for other purposes. In this connection, attention may be called to the fact that provided with warehouse capacity, the Purchasing Bureau of the Cleveland Hospital Council could take advantage of opportunities for seasonable purchases that would be neglected or considered impracticable for hospital executives.

3. AUTHORIZATION OF PURCHASES—The purchase of supplies or requisition on Central Purchasing Bureau should be made only with the approval of the superintendent, authorized purchasing agent or steward, the latter of whom should be subordinate to the superintendent. (Note D.)

Note D—The practice of direct purchases or Bureau requisitions by heads of departments or dietitians without the authority of the superintendent is pernicious and not good business procedure. The superintendents of certain hospitals first become familiar with some purchases when bills are received. Marketing in open markets by dietitians and heads of departments is good practice when properly authorized and checked by the hospital superintendent.

4. STANDARDIZATION OF SUPPLIES—The project of the Cleveland Hospital Council to standardize the majority of hospital supplies is absolutely necessary to the proper development and functioning of the Central Purchasing Bureau. Superintendents of hospitals who have preconceived ideas as to standards should come to an agreement with the committee on standardization in order that they may participate in the benefits to be derived from the uniformity of specifications, once standardization is accomplished. It will not be possible to extend the principles of standardization over all hospital supplies, but it is believed that the same can be extended over most provisions, housekeeping supplies and to a certain extent over furnishings. It is also recommended that an attempt be made to extend it over certain staple drugs and surgical supplies.

5. STORAGE FACILITIES AND ADVANCE PURCHASES—Hospitals should aim to take advantage of minimum prices that may be obtained through

(a) Quantity purchases.

(b) Purchases in advance of needs.

This plan necessitates increased storage or warehouse capacity for some hospitals.

Advantage can be taken of the markets by the seasonable storage of the following goods: canned goods, coffee, tea, navy beans, sugar, soap, starch, laundry soda, flour, butter, eggs, dried fruits; and sometimes crockery, glycerin, lard, narcotics, certain bulk chemicals, manufactured dry goods, etc.

Sufficient eggs should be stored in public warehouses in April, and butter in June, for hospital consumption during the months of maximum high prices. (October, November, December and January.)

Egg candling and storage should be carried out only by reputable and high class firms who will guarantee quality at time of consumption. Eggs should never be stored in anything but new cartons.

6. INVENTORIES—Physical inventories should be taken on the last day of each month, comprising all material stock in storerooms. The practice of most hospitals of depending on book inventories is fallacious and not justified in commercial practice, except for the drug department. (Note E.)

Note E—This recommendation comprehends inventory of unissued stock supplies as groceries and provisions, household supplies, gauze and cotton, dry goods, laundry supplies, in storeroom awaiting issue. Warehouse supplies should, of course, be included. If the system of monthly inventories is established on standard inventory blanks, an office employe assisting the steward or proper head of department, can take inventory and complete records in one or two days, depending on the size of the hospital and amount of goods carried in stock. It is estimated that the hospital which does not carry on inventory a stock of supplies equal to 10 to 15 per cent. of its annual purchases, is not taking advantage of seasonable purchases or storage possibilities. In this connection, attention is called to the fact that certain supplies, soaps for example, improve with storage, and that but few supplies deteriorate.

7. CONTRACTS—Annual, limited or quantity contracts should be sought for certain supplies; notably coal, electric lamps and milk from producers. It is strongly recommended that all hospitals make arrangements to obtain their milk supply from the producer rather than depend on commercial distributors.

8. DRUGS AND SURGICAL SUPPLIES—It is recommended that the Cleveland Hospital Council employ or develop a trained drug and surgical supply man as buyer. Expert knowledge of drugs and drug markets, and a practical knowledge of the hospital use of surgical supplies are qualifications necessary. It is believed that such a man could develop the purchasing in this department and prove a decided economy after the department is organized.

The offer of the School of Pharmacy of the Western Reserve University to cooperate with the hospitals of Cleveland in the standardization and manufacture of certain drug supplies is highly commendable. The hospitals of Cleveland have an opportunity to avail themselves of the use of a drug manufacturing laboratory and expert supervision of their local drug departments that is not vouchsafed to many hospitals in other cities. It is understood that the Cleveland Hospital Council has already taken steps to take advantage of this splendid proposition.

The venereal clinics of the city should take advantage of the free provision of arsphenamine by the state.

9. FOOD SERVICE AND DIRECTING PERSONNEL—The entire food service of the hospital should be under the direction of a trained dietitian. In small hospitals it is possible to combine the service of dietitian and housekeeper. In this connection, it should be remembered that trained dietitians may make good housekeepers after reasonable experience, but that housekeepers do not invariably make good dietitians without special training. The service in employes' and nurses' dining rooms should be under the direction of the dietitian as well as the food service to patients. In large hospitals it is necessary to study carefully and provide for the cooperative relationship of the steward's department, main kitchens, which are usually in charge of a

chef, and the dietitian. The details of the hospital food service are too intricate to be covered by a survey of this character.

10. **STEWARDS OR PURCHASING AGENTS**—In large hospitals stewards or purchasing agents are necessary in order to relieve the superintendent of many of the petty details of purchasing supplies. Where a steward or purchasing agent is employed he should have assigned to him duties and responsibilities similar to those of stewards of large hotels.

HOSPITAL ECONOMICS AND SALVAGING

1. **REPAIR DEPARTMENT**—Hospitals of over 50 beds can economically support a general repair man for steam fitting, electrical repair and carpenter work. The painter, or painters, should be employed by the month. The repair department can be extended in personnel and equipment as the bed capacity increases. The development of a central surgical instrument repair shop for the use of all hospitals is desirable. These shops should be under the control of one or more of the larger hospitals or of the Cleveland Hospital Council. Experience has demonstrated that surgical instrument and appliance shops can be made self-sustaining almost from the beginning. Prompt, uniform and satisfactory production at a lessened cost will be the inevitable result. Such an activity might well be included among the functions of the central brace shop as proposed for the orthopedic center. (See pages 200–201.)

2. **MANUFACTURING**—Manufacturing of certain hospital supplies can be extended by individual hospitals in accordance with their needs and the ingenuity of the hospital executives. A central sewing room for manufacturing dry goods should have a place in every hospital.

It is only necessary here to call attention to the fact that manufacturing can be extended without limit in hospitals that have the requisite repair personnel. Some hospitals manufacture fracture beds, bed elevators, wooden stools, mattresses, cotton waste from recleaned gauze, stretcher canvass, Bradford frames, extension apparatus, splints, etc., without limit. The manufacturing of dry goods adaptable to hospital use is limitless, depending on the facilities provided. The economical manufacture of soap from grease is strongly urged, and can be carried out in the laundry with very simple equipment. Soap thus manufactured should be used for household cleaning purposes as soft soap. Laundry soap should be manufactured from soap chips.

3. **WASTE AND SALVAGING**—Lack of attention to waste in hospitals is uniform all over the country. It is not within the province of this Survey to discuss it. Attention is called to the opportunity for salvaging and sale of waste paper, old barrels, waste rubber, old metal, rags, bottles, etc. Surgical gauze and bandages should be washed and re-washed until worn out. It can then be reduced to cotton waste or sold with rags.

4. **LABOR SAVING DEVICES**—Labor saving devices should be utilized wherever possible. Electric dish-washing machines are an economy of time

and labor in any hospital. In hospitals of sufficient size, the same may be aided by electric dough-mixers, meat-cutters and vacuum cleaners.

5. FIRE PROTECTION—This subject should be studied carefully by hospital trustees and executives with the assistance of expert advice. Few hospitals have a sufficient number of fire extinguishers, and where these are provided, they are not refilled with proper frequency. Only extinguishers approved by the Underwriters' Association should be used and these should be refilled twice annually. At each refilling, they should be labelled or tagged with date of refilling.

Standpipe with hose connections, fire escapes, fire buckets in attic, should receive attention. Heads of departments should be drilled or instructed in their duties in the event of a fire. Fire drills are desirable, but almost impossible on account of the frequent changing of employees.

6. INSURANCE (FIRE)—It has been ascertained that many of the hospitals surveyed are inadequately insured against fire. After appraisal of buildings, old policies should be cancelled and new policies taken out on the basis of reappraisal. It is believed that fire insurance rates are due to advance and it is recommended that appraisals be made, old policies cancelled and new policies issued so as to take advantage of present rates. It is preferable that hospital insurance policies be drawn for five-year periods, which provide for lower rates. Co-insurance policies are not recommended except for fire-proof buildings. For non-fire-proof buildings a maximum coverage is recommended by means of straight policies. The contents of hospital buildings should be fully insured as most hospital fires are small and the contents suffer to a greater degree than the buildings. Owing to the recent rapid increase in construction cost, hospitals should examine their fire insurance policies without delay and increase them to a figure approximating present values.

Compensation insurance covering employees should be carried by all hospitals. Elevators and automobiles should also be properly covered.

GENERAL RECOMMENDATIONS

PROFESSIONAL

1. It is recommended that standing house orders be established:

(a) For preparation of patients for operation.

(b) For after-care of surgical cases.

(c) For preparation of patients for confinement and after-care (pre-natal orders); (post-natal orders).

(d) For preparation of patients for operation and after-care in tonsillectomy.

2. That large hospitals sterilize and manufacture prepared catgut from raw catgut.

3. That large hospitals manufacture nitrous oxide gas.

4. That arrangements be made to purchase oxygen of local manufacturers rather than of jobbers. This will necessitate the hospital owning its own tanks which can be sent to manufacturers for refilling. All large cities have a number of plants manufacturing oxygen as a by-product. Its cost under these circumstances should be 50 per cent. less than prices paid jobbers.

5. That rubber gloves be not issued at the expense of the hospital to staff members for use on private cases, or to non-staff physicians.

VISITORS AND VISITING HOURS

Visiting the sick should be limited as much as possible, especially in open wards. Hospitals where possible, should reduce visiting days to three or four days per week, including Sundays. Two of these days could have visiting hours for wards 6:00 to 7:00 or 7:00 to 8:00 P. M., and the remaining two days 2:00 to 3:00 or 3:00 to 4:00 P. M.

Visitors to private rooms are difficult of regulation. They should be limited if possible to afternoons between 2:00 and 5:00 P. M.

Non-professional visitors in the operating room during operations should not be permitted. The practice of allowing relatives of patients to witness operations is dangerous and susceptible of much criticism. It should not be permitted.

HYGIENE OF HOSPITAL AND PERSONNEL

1. HEALTH TESTS—All employes handling or preparing food either in storerooms, kitchens, pantries, dining rooms, diet kitchens, etc., should have a complete physical examination, including a Wassermann examination, before being accepted for appointment. The medical examination and tests made should be adequate to exclude typhoid carriers from this service.

All nurses before admission to the training school, and employes before assuming duties of their positions should give evidence of a recent vaccination against smallpox, or be vaccinated.

In the event of development of cases of diphtheria among hospital personnel, all employes and nurses should have the Schick Test to determine susceptibility. The making of a Schick Test as a routine procedure prior to employment or entry to the training school, is unnecessary. It should not be neglected, however, in the face of an epidemic.

The authorities of the hospital should provide for and encourage medical examination of all their employes annually.

2. MILK SUPPLY—Hospital laboratories should install apparatus for testing their milk supply on delivery daily. Determination of quantity of butter fat, bacteria content, temperature and specific gravity will permit

checking of contract which would provide for certain minimum standards. Hospital milk should be cooled to 50 degrees immediately after milking, delivered at the hospital before reaching 60 degrees and contain not less than 1 per cent. of butter fat. The milk contract should call for milk for drinking purposes known as Class "A" grade. Milk should be delivered to hospital raw and provision made at hospital for pasteurization for such milk as may be desired pasteurized prior to use. (Note G.)

Note F—Class "A" milk in Cleveland is raw milk from tuberculin-tested herds, bearing 90 per cent. or better, with less than 50,000 bacteria content per c.c. It may be necessary in some instances to use Class "B" pasteurized milk, which conforms with Division of Health standards.

3. WATER SUPPLY—The hospital laboratory should periodically test the water supply. If storage tanks are in use, tests and culture should be made from tanks as well as spigots.

4. VENTILATION—During the winter months, hospitals with the plenum system should give rigid attention to the details of this system with frequent examination of air in wards and exposure of culture media. Hospitals using direct-indirect methods combined with heating, during winter, should make weekly examinations of air as a check on the mechanical operation of exhaust fans and the mechanics of the ventilating system.

III. Dispensaries

DISPENSARIES IN CLEVELAND

As outlined in the section entitled "Some Definitions," and as shown in Figure III., Part II., there are two classes of dispensaries in Cleveland—those treating the sick and those primarily concerned with preventive work, or the clinical and the public health dispensary, as the two types may be called. In Cleveland, five dispensaries treating the sick deal with general diseases; one, the Babies' Dispensary, confines its work to children under three years. There are also a number of industrial dispensaries supported by business establishments for the treatment of accident cases. The industrial dispensaries are dealt with in Part VII. of the Survey report, and are merely mentioned here. The public health dispensaries are dealt with in the next section of this chapter.

All of the dispensaries treating the sick except the Babies' Dispensary and the industrial clinics are attached to hospitals, and are usually called the out-patient departments of those hospitals. All of the public health dispensaries, on the other hand, are distinct from hospitals, with the exception of a few of the prenatal clinics.

The six dispensaries treating the sick are as follows:

Dispensaries	Dispensary Visits, 1919
Lakeside Hospital—Out-patient Department.....	59,891
St. Vincent's Charity Hospital—Out-patient Department ..	21,863
Mount Sinai Hospital—Out-patient Department.....	19,324
Babies' Dispensary and Hospital.....	14,977
St. Luke's Hospital—Out-patient Department.....	13,313
Huron Road Hospital—Out-patient Department.....	5,864

It is probable that the number of different individuals treated was about 30,000 in 1919.

From the above table it will be found that the dispensaries of Cleveland are comparatively few in number and small in size as compared with those of other leading cities. In the section on "Policies and Needs," such comparisons will be made. In this section the general work of the dispensaries is reviewed.

LOCATION OF DISPENSARIES

The six out-patient dispensaries are very unevenly distributed—Lakeside is on the lake at East Twelfth Street; Charity is one mile inland at Twenty-second Street; and Mount Sinai about one mile and a half inland at 105th Street. These three dispensaries treat all kinds of diseases. Huron Road Dispensary, located in the center of the city, does very little except surgical

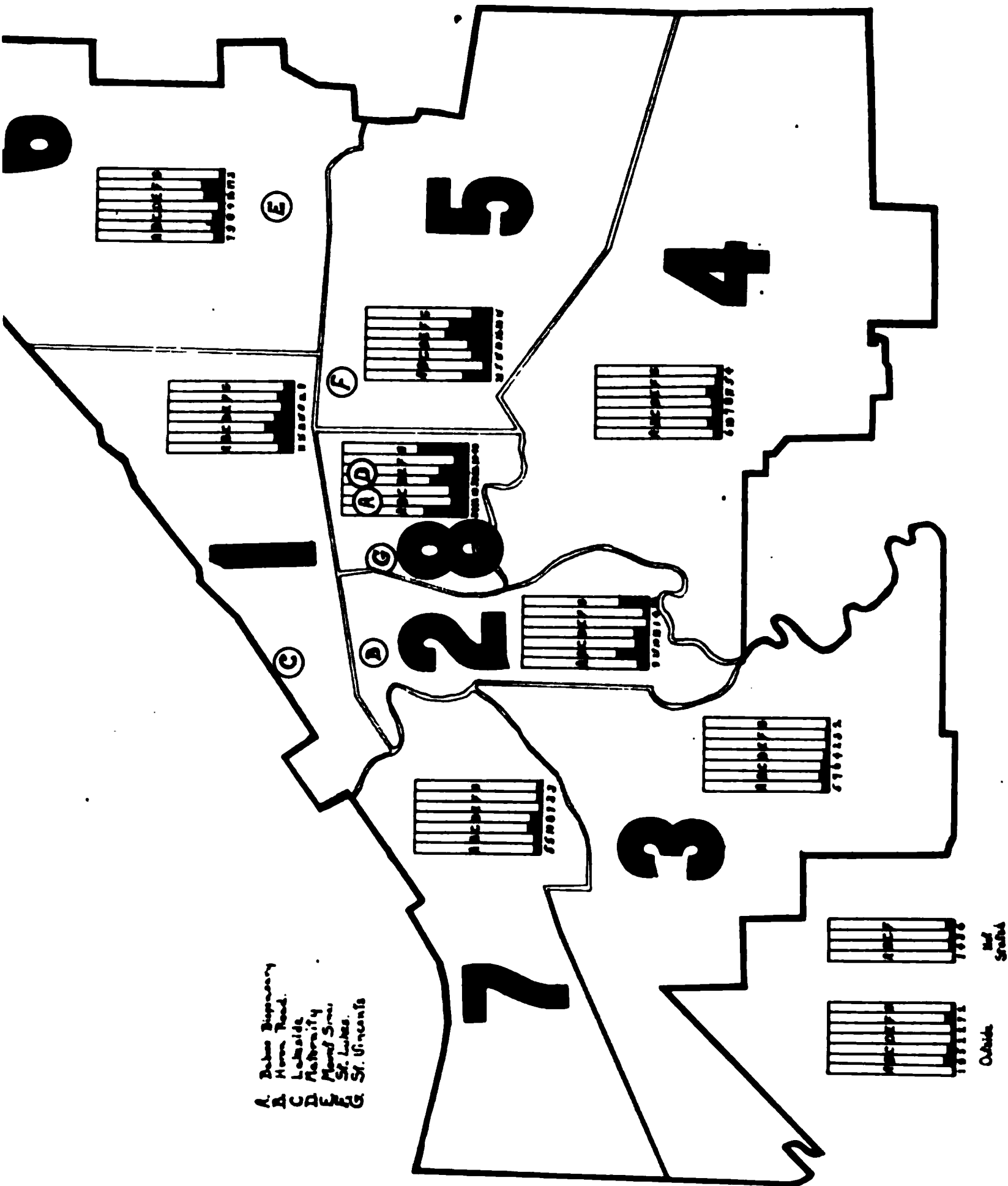


Fig. III.

—The height of the black rectangles represents the percentage of dispensary patients living in the district and attending the dispensary designated by the letter above.

emergency work; the same is true of St. Luke's, which is in the middle of an industrial district. The Babies' Dispensary, not far from Charity Hospital, confines itself to sick babies up to the age of three years.*

A study of locations shows that the dispensaries are not so located as to interfere with one another, but it is obvious that the west and south sides of the city are entirely without provision. The range from which patients come to the dispensaries varies considerably as shown by Fig. III. In Cleveland, as elsewhere, it is found that a dispensary with medical teaching draws from a relatively wider area, since consultation cases are sent to its staff for special study and since the reputation of its staff draws patients. In general the range of a dispensary varies somewhat in proportion to its reputation. People will go long distances to secure expert medical care of which they feel themselves to be greatly in need, but convenience of location and nearness of a dispensary are of great assistance in bringing people in the early stages of disease under care and in attaining easy supervision of treatment.

CLASSES OF DISEASE TREATED

Tuberculosis is not cared for in these dispensaries except in so far as diagnoses are made when patients come into the dispensary with other complaints, but the supervision and control of cases of tuberculosis are carried on by the Health Centers and the special sanatoria for this disease. The common "contagious" diseases are also excluded from dispensaries.

ORGANIZATION AND EXECUTIVE CONTROL

The management of a dispensary of any size, such as those at Lakeside and Mount Sinai, involves the handling of a considerable number of patients and a number of physicians, nurses, social workers, and other assistants, and needs skilled and executive direction. Rarely, however, has there been provided by the hospital any officer responsibly charged with full control of the dispensary and expected to give to it his main attention. At Lakeside and Mount Sinai, an assistant superintendent of the hospital is director of the dispensary, but at Lakeside until recently the actual conduct of the dispensary fell entirely upon the head of the social service department. At the smaller dispensaries—at Huron Road Hospital and at St. Luke's Hospital, and also at Charity Hospital, there have been no executive directors. The hospital superintendent is responsible for the dispensary as well as for other departments of the hospital, but no official has been assigned to take charge of the dispensary.

Only at the Babies' Dispensary has there been definite and continued executive direction and carefully worked out organization, under the professor of pediatrics at the University, with a salaried nurse devoting her full time to the detailed administration. This organization has indeed devoted too much attention to its own executive detail and administrative system,

*A small number of orthopedic cases receiving special treatment are accepted up to 14 years of age at the Babies' Dispensary.

but furnishes on the whole an example of the value of a well-thought-out and well-worked-out plan of dispensary administration under full-time, responsible executive direction.

BUILDINGS

The Babies' Dispensary is especially well designed for its purpose. The other dispensaries are all hampered for want of room or from old dark buildings. St. Luke's and Charity function in basements; Huron Road in a rather forlorn annex; Mount Sinai in a small double house; and Lakeside in poorly-arranged, inconvenient rooms. All of the institutions except Charity are planning new buildings, and Lakeside is planning certain modifications of the present plant that will make it much more suitable during the remainder of the time the building is in use. The unsuitable or inconvenient character of the plants is typical of the lack of attention paid to dispensary work in the past, while the increasing interest in this form of service is reflected in the projected developments.

PATIENTS

As shown on the map (Fig. III.), the existing dispensaries draw their patients largely from the central congested areas of the city. Sufficient numbers come from a distance to show that when the work and existing value of dispensaries is known, distance is not an insuperable obstacle. It would be interesting and important to ascertain how far the distribution of dispensary patients by districts agrees with the economic condition of the population in each section. Obviously, the dispensary draws primarily from the poorer elements. There are considerable districts in the west and south sides which appear to contain a large number of people who are financially as much in need of medical charity as those who are near the existing dispensaries. Some light is thrown on this point by the study of nationalities. Thirty-three nationalities were found registered among records studied in the six dispensaries. The proportion of foreign-born found in the more recent of these records of races is smaller than the proportion which these races bear to the total population of Cleveland. Knowledge of dispensaries and willingness to go to a strange institution penetrate only slowly among many groups of immigrants. At Lakeside Dispensary, American-born patients constituted over one-half of the total; Charity draws largely from Italians and Negroes; Mount Sinai shows over half of its attendance, Jewish; Babies' Dispensary shows 24 per cent. American-born parents, 18 per cent. Slavic, 16 per cent. Jewish, 14 per cent. colored, and many other nationalities represented in small percentages. Very little has been done at any of the dispensaries to provide interpretation for patients not speaking English. There is much complaint from outside charitable agencies that adult patients not speaking English find it difficult to make themselves understood, or to understand what the doctor finds to be the matter or what he wants them to do.

FEES AND FINANCES

It is becoming the general policy of dispensaries throughout the country to charge admission fees at each visit of a patient, the fee usually being of nominal amount (except in "pay clinics") and being remitted in whole or in part where the patient is not able to pay. In Cleveland, only one of the five general dispensaries, Lakeside, has adopted a general admission fee in its daytime clinics. Mount Sinai Dispensary charges ten cents for the first admission but not thereafter, and Charity makes a nominal charge when a person loses his admission card. All make charges for medicines at prices more or less corresponding to cost, and also usually charge for special treatment or appliances.

In the evening clinics which are designed for persons who are at work in the daytime and generally aim to be quite or nearly self-supporting, fifty cents a visit is charged by Mount Sinai, Charity, and Lakeside—the three dispensaries which maintain such clinics. Babies' Dispensary has a grade system—the highest class pays fifty cents and the lowest grade nothing for admission.

The charging and collection of fees and the designation of what these fees should be and when and why they should be remitted, require an adequate admission system for a dispensary. The present inadequate organization of most of the institutions would make it difficult to administer satisfactorily an admission fee system. It is of course essential that if admission fees are routinely charged, there be a system for receiving and accounting accurately for monies, as well as for deciding what fees should be paid by patients or be remitted. Having such a system in a dispensary is always stimulating to better administration and also serves to provide the funds for it. An important by-product, moreover, is the greater attention given to the economic and social condition of patients, promoting more careful attention to the social as well as the medical needs of those admitted, and protecting the medical profession better against those who could properly pay for the services of a private physician.

The exact cost of dispensary service in Cleveland is not ascertainable because no one of the out-patient departments of the hospitals fully separates its expenses from those of the hospital. Immediate expenses are usually charged to the dispensary, but the overhead—heating, lighting, supervision, and other general expenses—are not usually figured in. It is probable that the average cost per visit does not exceed fifty cents with the exception of the Babies' Dispensary, which is independent of a hospital. The five out-patient departments of the hospitals, with about 115,000 visits, probably cost altogether about \$60,000 a year. Really adequate administration of the dispensaries as hereafter recommended would cost more, but the difference would be met or more than met if adequate admission fees were charged. Failure to have proper cost accounting is a serious limitation on dispensary service. What seems cheap, is held cheaply.

MEDICAL WORK OF DISPENSARIES

Physicians work in the daytime clinics of the dispensaries without financial remuneration, except in a few instances of physicians doing special work at Lakeside and at the Babies' Dispensary. These two dispensaries are teaching clinics for Western Reserve University, members of the staff being also members of the staff of the medical school. In the evening pay clinics, all the physicians receive either a regular salary or an amount dependent on the fees received from patients. A large part of the dispensary work in Cleveland is connected with the teaching of medical students, all of the staff at Lakeside and at Babies' Dispensary, and part of the staff of Charity and of Huron Road, being connected with Western Reserve University Medical School.

The dispensary staffs are only in a few instances organized satisfactorily in relation to the staffs of the hospital with which the dispensary is connected. (See section on "Organization for Service.") The practice of making all appointments annually has been taken advantage of only at Mount Sinai. The Babies' Dispensary is the only one that has an accurate and complete enough system of record keeping to afford a basis for clinical research. Most of the opportunity for the student is lost because of inadequate records, and much duplication of work among dispensaries and within the same dispensary is necessitated for the same reason.

Opportunities for consultation among physicians representing different specialties is an important element in good dispensary work, but this opportunity is relatively small in the Cleveland dispensaries owing to loose organization and to very lax systems of referring and transferring patients between dispensaries or clinics. The making of efficiency tests of the medical work and the accumulation of facts on which to base judgment concerning administrative procedures has yet to be undertaken.

RECORDS

All of the five general dispensaries excepting Charity have a central filing system—all records concerning each patient being filed together. At Charity, the filing of the records of each particular clinic separately represents a serious drawback since the work of the different specialists upon a case cannot readily be assembled and the needs of the patient studied as a whole. Card record forms for the medical work are in general use, differing widely in detail. Conference and comparison would lead to improvement and standardization. Mount Sinai has a plan for a summary sheet for diagnosis and laboratory tests, an experiment which is worth pursuing.

SOCIAL SERVICE

The too considerable part played by under-staffed social service departments in the administration of several of the dispensaries is described in detail in the section on "Social Service". It may be mentioned here that in relation to cooperation with charitable agencies, the social service de-

partments have usually made an effort to define their attitude toward the social agencies, particularly in relation to the need of patients for material relief. All of the social service departments are avowedly opposed to the giving of material relief, regarding this as the duty of a "family agency" or relief society. In general an exception is made of certain medical needs which the social service departments regard as adequate reason for giving financial aid. Thus at Mount Sinai, it is felt that a patient's inability to pay for glasses or for dental work is an indication that there are other more general financial needs and the case is transferred, by the social service department, to general charitable or relief agency. Lakeside Social Service Department will give money to patients for carfare and occasionally will make small loans. A very small fund is in the possession of this department for such purposes. The Babies' Dispensary provides milk at less than cost or free, if necessary. This is provided for babies up to the age of fifteen months; after that if the baby is ill, it will be continued up to eighteen months, but never later. This is also done at the Health Centers. The total deficit for the year 1919 was \$18,000, of which the city pays \$6,000 and the Babies' Dispensary \$12,000. With these exceptions the social service departments do not give material relief, but transfer to charitable agencies all cases in which such needs appear evident or probable. Thus a pretty clear division of function between the social service department and the non-medical agencies has been worked out.

On the other hand, there has not been a satisfactory understanding between the dispensaries and the charitable agencies with reference to the examination of patients not acutely ill, but concerning whom a charitable society needs to secure facts as to physical condition, working ability, and the general health needs of the family. In some instances, notably at Lakeside, it has been difficult for charitable societies to secure examination of these cases, who often not being sick, do not interest physicians coming to the dispensaries primarily to see and treat illness. It has also been difficult, at Lakeside almost impossible, for charitable societies and agencies, to secure information regarding the diseases or defects found in patients in whom they are interested. The families known to charitable societies and receiving relief from them, can obviously not afford to pay for medical care, and it is particularly for such families that dispensaries should serve as family physicians. This means providing health examinations and advice concerning occupation, nutrition, etc., as well as diagnosis and treatment during illness. The dispensaries have given only a very limited degree of service in this connection, although a real beginning has been made at such places as the Babies' Dispensary and Mount Sinai. An important field for larger service lies here.

REPORTS AND TESTS OF DISPENSARY SERVICE

The annual reports of the dispensaries are most inadequate. The dispensaries probably serve altogether, in a year, as many as 30,000 persons—hospital beds, 50,000 to 60,000, or twice as many. Yet the attention devoted to reports of hospital work is not twice as much as that given to dispensary reports, but ten times as much or some such ratio. Even the number of

patients served or treatments given in each of the several clinics—medical, surgical, etc., were not obtainable from the dispensary reports, (except from one institution) and had to be specially secured for the Survey. The authorities of the institutions have not provided themselves with the elementary data with which to judge even the scope and amount of service rendered, much less its quality. The collection of routine statistics of the work of each clinic is a matter neither difficult nor costly.

DEFICIENCIES IN CERTAIN BRANCHES

Like the hospitals, the dispensaries are undeveloped in certain important specialties in which the public needs service. Clinics for children (over the age of three) are the most notable example. The children's clinics at Lakeside and Mount Sinai are very small; there are none at Charity Hospital, Huron Road, or St. Luke's. The age limit set by the Babies' Dispensary has been an unfortunate restriction. It has served to limit the development of clinics for babies elsewhere, and has indirectly tended to diminish the chance of adequate clinics for older children. Moreover, no one clinic for sick babies can meet the need for a city as large as Cleveland. All sick babies needing dispensary care are expected to come to one spot, the Babies' Dispensary, and even when there they are not treated unless the nurse at the admission desk agrees with the mother, or with the visiting nurse who referred the mother, that the baby is too ill to be at a Babies' Prophylactic Station and that the family is too poor to pay a private physician. A study by the Survey showed that somewhat more than half of a group of cases recently applying at the Babies' Dispensary were referred elsewhere. It is to be strongly recommended that: (1) Babies' Dispensary accept children up to 14 years. (2) Pediatric Clinics treating children up to this age be developed at all present and future dispensaries.

Clinic service for cases of heart disease is an undeveloped field in Cleveland. Mount Sinai appears to have recognized the problem and to have begun efforts to get cardiac cases under care, at Rainbow Hospital. It is highly desirable that cardiac clinics be developed as parts of the general dispensaries which exist or are to be established at City Hospital, Lakeside, Mount Sinai and the proposed central downtown dispensary.

RELATION OF DISPENSARIES AND HOSPITALS

The usefulness of the out-patient department as a means of increasing the efficiency of the hospital has been but slightly recognized in Cleveland. The dispensary should be the link whereby most of the hospitals' contacts with the community are made. Thus the admission of ward patients should be largely through the dispensary, though of course emergency and some other cases will enter otherwise. The medical study given in the dispensary to the patient should be the beginning of the hospital's work with him and not, as now, be usually wasted because the medical organization and the records of the out-patient department are not correlated with those of the hospital.

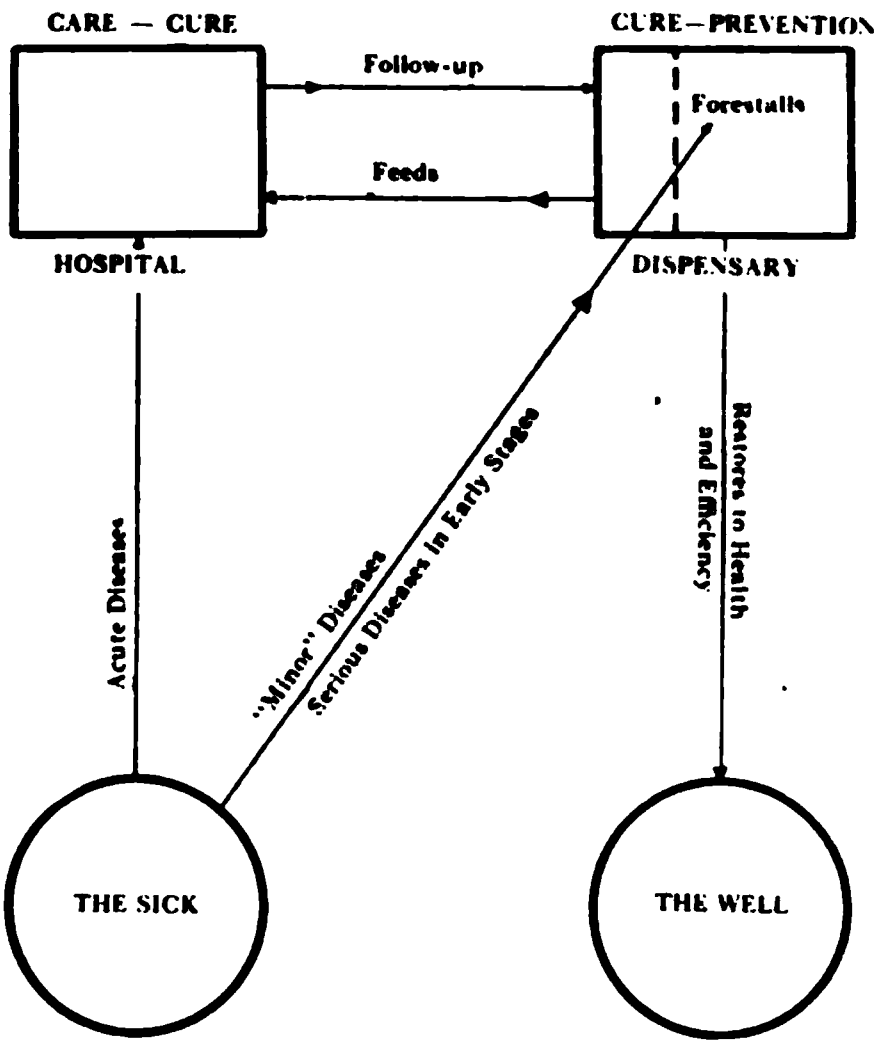


Fig. IV.

Inter-relation Between Hospital and Dispensary.

of equal if not greater importance, is the function of the dispensary in connection with the discharged patient. This subject is studied in detail in the sections on convalescence.

CLINIC MANAGEMENT

The time of doctors, given freely to service in clinics, is much too largely taken up in non-medical routine—calling in patients, attending to records, etc. and trained clinical assistants is necessary if the doctor's time in the clinic is to be of maximum value to himself and to the patient. The details of efficient clinic management have been worked out in a number of dispensaries in other cities.

RELATIONS TO THE MEDICAL PROFESSION

There has been for some years an apparent feeling on the part of some members of the medical profession that dispensaries interfere with private medical practice because they accept patients who could afford to pay a physician. Much of this feeling has been due to misapprehension of the facts; some has been due to the failure on the part of the hospitals to deal with the medical profession on even and open terms. The Survey has found evidence that cases who are able to pay a private physician have been refused by the dispensaries except occasionally, by mistake or honest misapprehension, and the proportion of such mistakes appears no larger than studies in New York and Boston have shown to be practically inevitable. The proportion of dispensary applicants who are able to pay private rates for the medical care which they need is believed not to be larger than three per cent. As the records of the Babies' Dispensary, of Lakeside, and of other institutions show, a number of such applicants are refused treatment. The principles which it is believed should govern the admission of patients to dispensaries are stated in the section on "Policies and Needs."

It has been unfortunate that this vital matter of relationship between the dispensary and the physician should not have been made the subject of systematic cooperation, conference and study by representatives of both. Had, for instance, a committee of the Hospital Council met with a committee of the Cleveland Academy of Medicine a number of times during the past five years, there would probably never have developed any attitude of disagreement. In the section on "Policies and Needs" a recommendation is made with the aim of bringing about such cooperative functioning. It is of vital importance to remember that the dispensary (also the hospital) is essentially a cooperative enterprise of the medical profession and the trustees and administrators, undertaken for the purpose of community service. Adequate development of dispensaries in Cleveland will offer to the rank and file of the medical profession opportunities of which it is now largely deprived—for consultation with specialists and for aid from laboratories and other facilities in diagnosis and treatment. Physicians may be sure that

whatever assists the public to give more attention to bodily health and to understand and utilize the most advanced resources for medical care, will also stimulate the use of that primary and best loved resource, the family physician.

THE PUBLIC HEALTH DISPENSARIES

As previously pointed out, the public health dispensaries differ from those described in that they lay emphasis on preventive work rather than on diagnosis and treatment of sickness. They also differ in that each public health dispensary limits itself to a definite area, receiving patients only from that district. Generally speaking, the offer of a preventive and educational service will draw persons from a much smaller area than in the case of a clinic treating sickness. The effective range of an infant welfare clinic is very small; that is, the area from which it will draw many cases is limited to a comparatively small region around the dispensary. The same is true of the prenatal clinic, while the tuberculosis clinic has a somewhat wider range. In practice the district which a public health dispensary does serve depends largely upon the extent to which it is advertised or the degree to which nurses attached to the dispensary go into homes and interest persons to come to the clinic. These efforts, however, are at a disadvantage if an attempt is made to bring many persons from considerable distances.

The public health dispensary has a militant purpose. It aims to combat definite disease like tuberculosis or a group of diseases such as cause infant mortality. It should make no restriction in receiving patients because of social status. Properly conducted, a public health dispensary should in no way interfere with the work of private physicians, but tends to send patients to them since disease or difficulties are discovered which dispensaries do not treat and for which patients will be advised to seek treatment. The object of a public health dispensary is, or ought to be, the reaching of all of the persons within a certain district needing its care. It must measure its work on a population basis and see how far it is able to reach 100 per cent. of the persons of actual or probable tuberculosis in its district, or all the babies or expectant mothers. This in practice would require that a public health dispensary, with a certain staff, must serve only so large a district as it can effectively reach. The time has not yet come when a general statement can be made as to the area which a given type of public health dispensary can cover, and this must be the subject of further study in Cleveland and elsewhere.

Reference to Table I. shows that twenty-two different sites are utilized for public health dispensaries or clinics with a public health purpose, and the purposes served include four types of work: tuberculosis, infant care, prenatal care, and dental service. It should be added that the clinics treating the venereal diseases (at Lakeside, Mount Sinai and Charity Hospitals) fall on the border line between the public health dispensary and the dispensary treating the sick. They have or should have the militant purpose of the public health dispensary, but they are largely concerned with the diagnosis and treatment of definite disease. Since Part V. of the Survey report is devoted to venereal diseases only this mention is made here.

Further reference to Table I. indicates that the first two of the four services, tuberculosis and infant welfare, are under the charge of the Division

of Health, while the other two, prenatal and dental service, are under private agencies. The Survey reports on Child Hygiene (Part III.) and on Nursing (Part IX.) have given considerable attention to prenatal as well as to the other public health services which involve the nurses' work in the home as well as in the clinics, and the report on Tuberculosis (Part IV.) has covered that field. Certain administrative aspects may properly be discussed here

PRENATAL CLINICS

In prenatal service the function of the clinic is essentially diagnosis. The examining physician should, so far as possible, be able to decide what special care, if any, each expectant mother requires during pregnancy and at delivery, and to advise her accordingly. The diagnostic and administrative work of the clinic are of relatively limited value without the home work of the nurse. The prenatal clinics also play a certain part in medical and nursing education. It should be apparent, however, that the amount of clinical service or the number of obstetrical cases, needed for such purposes of education, is only a small fraction of the amount of prenatal service needed for the community as a whole. In 1919 there were 19,123 registered births in Cleveland, and of these 1,251 were delivered in their homes by out-patient teaching services connected with the prenatal clinics of Maternity Hospital. This is $6\frac{1}{2}$ per cent. of the total. It is certainly true that not over 10 percent. of the obstetrical cases of Cleveland are required, or could even be directly utilized, for teaching purposes in connection with prenatal clinics. Practically every expectant mother would benefit by such service as is rendered at a well managed prenatal clinic. The need of prenatal care is far broader than the need for "educational material." The two purposes are not at all inconsistent. The one fits into the other.

The point is of practical importance because of the failure of those responsible for the University teaching of obstetrics and for the maintenance of the prenatal clinics connected therewith, to recognize the community need as broader than their own special interest. Four different agencies maintain eight prenatal clinics. There is room for many more than eight prenatal clinics and for more than four agencies, provided all were working as part of an agreed general program. At present the University agency appears to take the attitude of urging the cessation of the activities of such prenatal clinics as those of Mount Sinai and the University District. The feeling produced on the other side is what may be expected. The effectiveness as well as the extent of the work is substantially diminished by such a situation. As a *reductio ad absurdum* we find two prenatal clinics, next door to one another, at 2509 and 2511 East Thirty-fifth Street, one conducted by Maternity Hospital, the other by the University District, for the training of its students.

The recommendations made by the Survey in the reports on Child Hygiene (Part III.) and Nursing (Part IX.) will remedy this condition if put into effect. It may be added here, as one detail, that there is no justification for two

clinics side by side on Thirty-fifth Street. Although the University District prenatal clinic is actually under the auspices of the Division of Health, it, as well as the Maternity Hospital prenatal clinic, is used as a teaching field by the University, and it is largely the responsibility of the University to see that its agents and officers dealing respectively with medical and with nursing education, work in harmony. The two clinics should be combined. It is a matter of indifference which plant is retained and which given up. The University should, as now, appoint the medical and nursing heads of the service; the internal administration of the clinic, for reasons of economy and convenience, should continue under Maternity Hospital; the nursing teaching should be part of the University District plan and be coordinated with the community plan for prenatal and obstetrical nursing service proposed by the Survey. (See Part III.)

It is generally helpful for a hospital which has a considerable maternity service in its wards, to maintain a prenatal clinic (which should be used also for the supervision of post-partum conditions and be administered as part of the general dispensary attached to the hospital). Such hospital clinics should, however, work as cooperative parts of the city-wide plan for maternity care. There is need for many more prenatal clinics, however, than are or can be connected with hospitals. Wherever possible the prenatal clinics should be in the same buildings as the Health Centers of the Division of Health. By the bringing together of a variety of different health activities within one building, each service tends to strengthen the others by increasing the contact of the neighborhood with the Center, its purposes and personnel; and to correlate many details of work by the medical, nursing and clerical staffs. Such combinations also bring administrative economies in management and save such present wastes as renting rooms for prenatal clinics which are used only a few hours each week. In advance of the assumption by the city of prenatal work as a regular service in its Health Centers, cooperation between the city and the private agencies may usefully proceed in this manner.

DENTAL CLINICS

Dental service as a branch of public health dispensaries is a recognized activity in which Cleveland is singularly deficient.

The three mouth hygiene dispensaries operated by the Cleveland Mouth Hygiene Association at three of the health centers are operated for fifty weeks of the year, five days a week, and three hours at each session. Each unit includes a dentist and an assistant. The cost of these is met from the Community Fund as a part of the budget presented by the Welfare Federation.

These three Mouth Hygiene dispensaries, operated five half days per week, are the only available and acceptable service (except the private dental practitioner) for thirty to thirty-five thousand parochial school children. It is estimated that fifteen Mouth Hygiene Units operated eleven half days per week would serve this group of children quite well; *i. e.*, would provide the prophylactic service necessary for eighty-five or ninety per cent. of these

children and would provide for from one-third to one-half of the repair service necessary.

The grave deficiency of dental service in Cleveland is illustrated by the fact that the total clinic provision in the city includes only that at the three health centers, the six clinics at public schools and the dental clinic at the City Hospital, a total of ten dental chairs running 156 hours a week. In Boston five institutions offer either free, at or below cost, dental service with a total of 247 chairs used for 5,956 hours a week. The present policy of the College of Dentistry of Western Reserve University renders it hardly possible to class it with public service clinics for dental purposes. (See Part VIII. of Survey Report, page 685.)

Dental care for the poor in Cleveland is limited largely to extraction and remedy of gross pathological conditions causing obvious inconvenience or pain. Lack of knowledge of the needs and possibilities of oral hygiene is responsible for the neglected teeth of most dispensary patients. Dental clinics where a small fee is charged are badly needed in the congested districts.

It is strongly recommended that dental service be developed as an activity of all the health centers, including the central downtown dispensary, and that each dispensary connected with a hospital should include a dental clinic for both adults and children. The Survey has recommended to each of the major hospitals that a dental surgeon be a member of its staff, with rank as head of a department; and that under his direction a dental clinic be conducted, with the necessary dental assistance. Pay dental clinics for persons of moderate means would be a great public benefit.

THE "HEALTH CENTERS"

The tuberculosis and infant welfare work of the Division of Health may be studied from the standpoint of the management of its clinics as well as from that of the specialist in the medico-social problems of the diseases concerned. Of the eight "Health Centers," seven include tuberculosis clinics; all have infant welfare clinics, and there are in addition, six "baby prophylactic stations," subsidiary centers for the better covering of more neighborhoods.

As to buildings, three of the Health Centers are located in stores, occupying the entire ground floor in each case. Two of the stores have light from one side only; one of these two has good light from the rear. The third store stands on a lot alone and has excellent light and ventilation on all sides. All three have the advantage of unusually good front light. These three centers are the ones selected by the Mouth Hygiene Association for the installment of the dental work. Three other centers, Nos. 1, 3 and 4, are located in single dwelling houses. No. 4 has the entire house (allowing a man and wife to occupy the upper floor in exchange for the care of the store fronts); all the rooms have some daylight, making the total result better than in the stores. Health Center No. 5 is the most fortunately located of all, being

in a public bath-house, which is also a gymnasium and social club-house; there are here ample space and a fortunate arrangement of rooms. No. 8, the University District center, is in half of a double house. It is neither very light nor roomy and arrangements are poor for the work. The six auxiliary stations are: one in a library—an excellent room designed for a kindergarten room; one in a Y. W. C. A. building; one in a community center; two in public bath-houses; and one in a settlement house. One of the public schools in the downtown section is used in the summer for an extra station.

All the clinics are limited to essential equipment. They are all supplied with imported scales for weighing the babies in grams. A new dental equipment was being installed in Center 7 at the time of the visit of the Survey investigator. The buildings were not adequately heated in the cases of Nos. 7 and 8, where dependence had to be placed on stoves, with no suitable place to store coal. Nos. 1 and 4 were heated by gas stoves which markedly affected the air.

There are 35 tuberculosis clinics a week held in the seven main centers. University District does the home visiting on tuberculosis cases in its area, but gets the cases from the clinics held at Center 2. These clinics are held Monday, Wednesday, Friday and Saturday afternoons from 2 to 4 P. M., and Thursday evenings between 6:30 and 7 P. M.

In the Child Hygiene Department 46 clinics a week are held. Centers 6 and 7 each hold six clinics a week. Center 2 and the auxiliary station at Alta House hold two each a week. The other ten stations each hold clinics weekly. These clinics are held between 9:30 and 10:30 A. M. The nurses reported that Saturday was always the least crowded day.

Two other types of clinics are held in the Health Centers, but are under auspices somewhat different from those of the two above mentioned. The district doctors hold visiting hours in three of the clinics from 9 to 10 A. M. each day. An average of about six patients come to these clinics daily for dressings, or to get advice for minor ills. The number is frequently two to three and it is not infrequent for the doctor to have not a single caller.

The three dental clinics maintained by the Mouth Hygiene Association in Centers 2, 6 and 7 meet five times a week from 1 to 4 P. M., and are largely used by parochial school children and the families of patients with tuberculosis.

It can be easily seen that these clinics do not use nearly all the available daily hours. With the exception of Station 5 the rooms are idle during the other hours. Stations 6 and 7, both of which have infant clinics six mornings a week, and dental clinics every afternoon but Saturday, do not waste much time, but the other buildings could serve useful purposes at other hours. This is true of the evening hours for all stations.

The patients attending the clinics are derived from different sources. In a study made of a series of cases attending the Infant Hygiene Clinics, 57

per cent. were found to be referred by neighbors, friends or relatives; 37 per cent. referred by the Health Division and clinic nurses; 2 per cent. by the Visiting Nurse Association; and 4 per cent. by physicians. The practical value of the work is rather well illustrated by the large number of cases sent by apparently satisfied clients. In considering this, the use of the clinic in providing an inspected milk at lower than market prices must be borne in mind. It is not purely the desire for a health inspection for their children that brings the mothers.

In the tuberculosis clinics the largest percentage came in as a result of efforts of the Division of Health nurses, 46 per cent. having come in this way. 14 per cent. were referred by physicians and by friends or relatives; 11 per cent. by dispensaries and hospitals, 7 per cent. by the Board of Education (referred when there is a health problem in relation to the issue of working papers), 3 per cent. by the Associated Charities, and 1 per cent. each from the Red Cross, the Juvenile Court and the Visiting Nurse Association. The source of reference for the other cases was not stated. These figures do not refer to active or positive cases only, but to all patients that came to the clinic for purposes of examination.

There were about three times as many visits to the Infant Hygiene clinics as to the tuberculosis clinics in 1918, the last year for which the figures have been calculated. This attendance is out of proportion to the number of active cases, for there are nearly twice as many active cases of tuberculosis under care, as cases in the Infant Hygiene Clinics. This generous attendance in the Infant Hygiene Clinics is doubtless due to the insistence on the part of the clinic that the baby come in every two weeks in order that its milk be continued.

In the Infant Hygiene work the nurses give much assistance in the clinics. They weigh each baby, suggest to the mother regarding clothing and visit the cases at home to instruct in milk modification when this seems desirable. They also keep the milk book. This is a big job as well as a very large book. Each patient has to be graded as to the amount he shall pay for milk. There are five grades similar to those adopted at the Babies' Dispensary. The nurses have not established quite such hard and fast regulations as at the Babies' Dispensary, but are free to exercise some judgment. A milk that would retail at 30 cents a quart is sold at the various rates according to the family grade:

	Cost per Qt.	Cost per Pt.	Cost S. M. A.*Qt.
Rate 1.....	22c	15c	30c
Rate 2.....	17c	11c	17c
Rate 3 α	10c	5c	10c
Rate 3 b	5c	5c	5c
Rate 4.....	0	0	0

*Synthetic Milk adapted.

Any families claiming to be in grade 4 who are not referred by the Associated Charities are cleared through the Social Service Clearing House while the patient is still present. Then if the family is known to some relief agency the agency is consulted to see if the family should receive free milk. The majority of families are in rate 3a or 3b. S. M. A. costs 40 cents a quart retail. It is a special preparation of fats and oils devised by Doctor Gerstenberger and prepared in the milk laboratories of the Babies' Dispensary.

The doctors prescribe the milk for two-week periods. It is delivered by the Belle Vernon Farm Company. The child must return in two weeks or the milk will be discontinued.

Work and Personnel

The work of the Health Centers may be divided into medical and nursing work. The type of work for each group must be divided into the four departments or activities of the clinics.

Medical Work

The medical work is under the supervision of the Commissioner of Health with a department head in charge of each branch. At present the Bureau of tuberculosis has no chief. The Commissioner of Health is therefore responsible for its activities. He is not able to give the health centers much detailed supervision. This is especially unfortunate because there are no special requirements for the doctors working in the clinics regarding experience with tuberculosis. There are eight physicians in the Bureau, each receiving salary of \$780 per year for attending five clinic sessions weekly. All the cases requiring sanatorium care or hospital admission are passed upon by the clinic doctors. The medical records would indicate that the physicians made a careful lung examination in each case. Re-examinations are seldom recorded. Sputum analysis, though not absolutely routine, is fairly frequent. Many records showed that the patients neglected to return the bottles given out for collecting sputum specimens. The doctors seemed interested in the work and there was comparatively little complaint among the nurses that the doctors were not punctual. Tonics, cathartics and cod liver oil are occasionally prescribed at the clinics.

The Chief of the Bureau of Child Hygiene takes an active part in the work. He personally conducts one clinic a week at Center 5. He visits the other centers rarely, stating that all the doctors on duty have served in the Babies' Dispensary for at least one year and do not need supervision. Much of the rest of his time is spent in the drawing of charts and collecting statistics, work which might better be undertaken in the Bureau of Vital Statistics. His salary is \$3,300 a year and he devotes his full time to the work. The Chief of this Bureau is also responsible for the infant eye work and the inspection of boarding homes for children. These two functions have been so far systematized as to require practically nothing of his attention. He is also responsible for the licensing of midwives, but this is not associated with the clinic work.

The work of the physicians in this bureau is excellent in certain respects, yet lacks much that would make it of vastly greater value. The babies come to the clinic and are undressed and weighed—they are then dressed before they go to the physician. He discusses food with the mother, writes a prescription for the milk the child will need for the next two weeks and fills in its formula on a printed detailed slip. If the mother complains that the child has a cough, she is advised to take it to the Babies' Dispensary where it can receive a chest examination. The Survey investigator noted the following case. A mother brought in a two-year-old child, very thin and undernourished and unable to sleep. A private doctor had told the mother that it had worms and had prescribed medicine. At the clinic the mother was advised to return to the private doctor, although assured that the child did not have worms, and no directions were given regarding diet or general habits, which were admittedly bad. The ability to prescribe diet for infants up to 15 months is highly developed in the clinic physicians, but the giving of other health directions and the diagnosing of cases adequately enough to relieve the mother from trips to the Babies' Dispensary are not usual. The nurses complained of the difficulty in interesting the doctors in the child between 3 and 6 years. These little ones are allowed to come to the clinic for weighing and health directions, but not much information appears to be gained from the doctors which is of aid to the mothers.

The only other medical work done in the stations is the work of the district physicians who make their headquarters at the dispensaries. They are called by the nurses to visit various cases in the district, including contagious or tuberculosis cases, as occasion may require. They report to the center each evening for calls that have been left there during the day.

Administrative Work

This is all in the hands of the supervising nurses. There are two clerical assistants in each center, but the nurses complained that few of them were able to take any responsibility. The nurses do not even trust the care of the milk book and the collection and accounting of the money paid for milk in the clinics to these helpers, but nurses have to be assigned to these duties.

Social Work

There is no social work as such. All cases coming to the tuberculosis clinic are cleared through the Social Service Clearing House. All rate 3 and 4 cases coming to the child health clinics are cleared. Referring and consulting about cases depend on the interest and understanding of the nurse carrying the case. All the rating for milk is done by the nurses. The judgment used varies in wisdom, depending on the nurse doing the work. The nurses frequently attempt to make social adjustments in a distinctly amateur way.

Records and Filing

A system of filing by families has been adopted and has a certain distinct advantage. One number is given to the family and each additional member

no comes for any cause gets the same number with an additional letter. Thus there are found in the same folder cases for the tuberculosis clinic, for infant hygiene, for acute eye conditions, and possibly for a contagious condition. But keeping families in groups this way makes necessary a rather elaborate daily attendance book and careful cross indices. It is convenient when the nurse writes up the record and keeps all the records of each family together. Where general home visiting is so vital a part of the clinic work seems an advisable plan. There is a social family history card filled out for each family at the time of the first visit; this is a form with detailed readings. There are various forms for the different departments. The infant hygiene card has a weight chart on the back and is similar in every way to the card used at the Babies' Dispensary. There are special forms on which diet is prescribed which are worthy of notice. There are forms for city hospital admission as well as admission to Warrensville. All the records seemed to be well filled out for the first visit. The routine recording of weight uses the dates of all subsequent visits to be noted, but the facts observed by the doctors were not always recorded. Each nurse keeps a daily record of her work and detailed monthly reports are filed at the Division of Health.

Financial

It has not been possible to obtain from the Division of Health an itemized expense account of the Health Centers for 1919. It is known that the expenses for the year from the three departments using the health centers were as follows in 1919 as follows:

	Total	Salaries
Communicable Diseases.....	\$ 53,526.97	\$ 31,171.84
Tuberculosis.....	72,883.22	60,697.99
Infant Hygiene.....	65,330.05	53,352.09
	<hr/>	
	\$191,740.24	\$145,221.92

The rates of salaries are as follows:

Physicians

Chiefs of Bureaus.....	\$3,300.	Full time (2)
District Physicians	3,300.	Full time (7)
Tuberculosis clinic—physicians.....	780.	5 clinics (8)
Infant Hygiene clinic—physicians.....	800.	6 clinics (6)
Infant Hygiene clinic—physicians.....	450.	3 clinics (9)

Nurses

Director of field nurses.....	\$2,400	Full time (1)
Assistant director.....	1,980	" " (1)
Supervising nurses.....	1,660	" " }
Field nurses—2nd year.....	1,440	" " } (78)
" " 1st year	1,320	" " }

Clerical Workers

Senior Typists.....	\$990 or \$1056 Full time (10)
Junior Typists.....	792 Full time (7)

Almost 76 per cent. of the cost of the work goes to salaries. There is some income from the work, and there is another large item of expense not included in the foregoing—that is the milk, as mentioned above. The milk report for one month showed that Rate No. 1 overpaid exact cost \$106. Rate No. 2, by buying of pints instead of quarts, overpaid \$1.83. The other grades all underpaid, making the deficit for the month somewhat over \$700. This is a small deficit; it is usually about twice that. The nurses charge \$1 or 50 cents to teach milk modification at home. The dental work is charged for—Rate 1 pays 50 cents each time; Rate 2 pays 50 cents at first and 25 cents thereafter; Rate 3a pays 25 cents first and 25 cents thereafter; Rate 3b pays 25 cents at first and 15 cents thereafter; and Rate 4 gets free treatment. These dental collections go to the Mouth Hygiene Association.

CONCLUSIONS

In summary, Cleveland has made a real beginning in a public health dispensary program. Its health centers meet real needs, and their medical and nursing organization provides in the main a sound foundation both for improvement in details of service and for future advances in policy and scope. Aside from such general recommendations regarding dispensaries as appear in the next section of this chapter, the following may be made here:

1. There should be coordination between the publicly and privately supported public health clinics; notably by the utilization of publicly maintained plants (Health Centers) for prenatal clinics (see page 903). This would aid in utilizing the Health Centers to their capacity.

2. The infant hygiene work should include children up to six years. The present limitation of work to infants and children under three years of age is a great misfortune. With little additional expense better care and supervision could be extended to the children up to six. The supplying of milk, a daily necessity which makes return to the clinic vital, has swelled the attendance rather than improved the excellence of the medical work or the pertinence of the health directions. This milk plan is doubtless wise has surely resulted in preventing much illness among infants, and should be continued; but it should be a relatively smaller part of the clinic service. The doctors should develop keener and more intelligent interest in the children over 15 months, and should be prepared to write out as accurate a diet for them as for the younger children.

3. The division line between the sick and the well child should be extended a little in favor of the sick child. That is, the doctors should more freely make examinations and give at least health directions to children with colds. Skin conditions are another bone of contention, the prophylactic center doctor feeling they are "diseases" and should go to the Babies' Dis-

dispensary, and the Dispensary feeling that the mild forms belong in the Health Centers.

4. The Health Centers should utilize clerical service more freely for business management and executive details, and require less of these duties from the nurses. The recommendations of the Nursing Report should be followed in this matter.

5. The Centers should as soon as possible include in their services the examination of the supposedly well, both adults and children. The offering of such periodical "health examinations" may perhaps best begin in the proposed central dispensary (see discussion of that subject), but is a proper function, ultimately, of all health centers.

6. Increase in the number of dental clinics is urgently needed as recommended in Part VIII. of the Survey Report.

7. The Health Centers should include administrative and sanitary activities, such as properly belong to a local office of a Health Division under a district form of organization. This, as well as the much-needed improvement in supervision, will be possible only with an advance in efficiency of the Division of Health, its better organization, and larger financial support.

POLICIES AND NEEDS

A comparison between the amount of dispensary service in New York, Boston and Cleveland shows a startling contrast. The 115,000 dispensary visits made during last year in Cleveland to the dispensaries treating the sick must be compared with some 3,600,000 in New York City and with some 750,000 in Greater Boston. In proportion to population, Greater Cleveland has about 14 dispensary visits per 100 population, New York about 60 per 100, and Greater Boston about 50 per 100. A further comparison may be made with Chicago, which in 1918 had 835,000 dispensary visits recorded, or about 35 per 100 of population. It will be seen that Cleveland's provision is extremely low. As brought out in the early part of this report, this deficiency is reflected in many ways in hospital service, and this will be emphasized in the following sections of this chapter; but the shortage of dispensary service also means for the community as a whole, deprivation of adequate medical care to many needy groups in the population, lack of specialist service to many more, failure to diagnose and treat many diseases during the early stages, and deprivation of consultant and diagnostic facilities to many members of the medical profession.

Preceding a statement of recommendations for improvements or increase of service to meet these deficiencies, a statement is made of certain policies regarding dispensary management and administration.

DISPENSARY POLICIES

Admission of Patients

(a) **POLICY**—In determining admission to a dispensary, the needs of the patients and the protection of the community must be the primary considerations. The medical profession has a right to be protected against imposition by persons who seek in clinics the unpaid service of physicians, when they could afford to pay for the medical care which they need. The public has a right to service.

(b) **STANDARDS**—In determining the admission of individual cases to a dispensary, three points need to be considered: namely, the income of the patient or family, the size and responsibilities of the family according to a reasonable standard of living, and the character and probable cost of adequate medical treatment for the disease or condition found. It should be added that under certain circumstances public health considerations must be the determining factor, for example, a case of infectious syphilis may demand immediate treatment, irrespective of what later disposition of the case is made. When a difficult or obscure condition must be diagnosed, or when treatment by a specialist is required, patients might be accepted whose circumstances would enable them to pay for the services of a family physician, though not for consultation with or care by specialists.

(c) **PROCEDURE**—The social service department should be responsible for the admission of new patients. Certain practical points connected with this matter will be found in the discussion of social service.

Medical Relations

(a) **POLICY**—The medical staff of the dispensary and also the organized medical profession of the community have a right to be consulted about policies or problems affecting their interests. In the case of the general profession, this should be possible through conference between representatives of the dispensary and representatives of the Academy of Medicine. The Central Dispensary Committee hereinafter proposed (page 920) would largely accomplish this purpose.

(b) **COMPENSATION**—Hospitals and dispensaries cannot expect to secure enough of prompt, regular and efficient medical service unless compensation is given to the physicians of the staff either in opportunities for study and experience, or in financial remuneration, or in both. The generous willingness of physicians to render humanitarian service is traditional and unquestioned, and should not be unduly exploited. Each dispensary or out-patient department, considering its own type of work and the medical facilities offered, must determine for itself the manner in which it can best attract and retain an adequate medical staff. The advice of central bodies such as the proposed dispensary committee and of the Cleveland Academy of Medicine would be of value in this connection from time to time.

(c) **CONSULTATION**—A definite function of the dispensary, particularly of the major institutions, is to provide consultation facilities for physicians.

(d) **DIAGNOSTIC FACILITIES**—In addition to opportunities for consultation, dispensaries should make the services of their laboratories and X-Ray departments available to the private patients of physicians (when referred by them) when such patients cannot afford the rates charged by private laboratories or by X-Ray specialists.

Fees from Patients

(a) **POLICY**—It is a good policy to charge admission fees and also treatment and medicine fees; no patient being denied a needed service because of inability to pay the stated fee in whole or in part.

The presence of medical teaching need in no way affect this policy.

(b) **RATES**—For clinics receiving the gratuitous services of physicians, an admission fee of 25 cents per visit is reasonable at the present time. It is desirable that through the proposed Central Dispensary Committee, fees be made uniform for similar classes of service.

For clinics which aim to be self-supporting and which furnish a more than nominal remuneration for the physicians, the fee should be not less than 50 cents a visit, and may be higher for certain classes of services. The basis on which such fees should be adjusted is the cost of service.

Fees for special treatments, apparatus, eye-glasses and medicines, should be fixed at or somewhat above the cost of the materials and immediate service provided.

Definite schedules of all the admission and the more usual treatment and medicine fees should be posted in suitable places in every dispensary.

(c) **PAY CLINICS**—Clinics charging fees of 50 cents or more a visit should be regarded as pay clinics and should provide financial remuneration for their medical staff. In determining the rates of such remuneration, conference with representatives of the Cleveland Academy of Medicine is suggested, or the proposed Central Dispensary Committee would serve this purpose.

Such pay clinics should aim to serve self-supporting families of limited means, particularly in the specialties. There is much need for the further development of such clinics in Cleveland.

The admission system in connection with pay clinics should protect the interests of the medical profession as well as of the patient by adopting and carrying out the standards above outlined.

(d) **REMISSION OF FEES**—The admission desk in the smaller dispensaries should be responsible for the remission of all fees. In large dispensaries the admission desk may be unable to attend to all remissions in the case of old patients, and social workers in one or more clinics should be authorized to pass on remissions for the appropriate group of cases.

Adaptation of Clinics to Clientele

(a) **HOURS**—Evening clinics for working people are desirable in all or almost all dispensaries. These clinics may well be pay clinics.

(b) **FOREIGN-SPEAKING PATIENTS**—Special efforts, as outlined in the discussion of the foreign-born, in the section on the "Human Problem of the Hospital Patient," should be made to enable persons not speaking English to receive effective treatment.

(c) One important group of the clientele of nearly all dispensaries is that of the beneficiaries of other charitable or medical agencies. It is part of the duty of a dispensary to serve as the family physician for these. This requires: (1) examination of patients and families and full reporting of conditions found to the society interested; (2) treatment of those needing care, usually without fee; (3) special arrangement whereby the social service department of the dispensary has charge of "steering" these cases and insuring that the work is done and the reports are rendered with a minimum of administrative demand upon the clinic physician.

(d) The dispensary should be a main agent in the admission of hospital patients to the wards and in the follow-up of those discharged. (See sections on Convalescent Care.)

Inter-relations of Dispensaries

(a) **DUPLICATION**—The pursuance of treatment by a patient or the members of a family at more than one dispensary at the same time should be discouraged and prevented as far as possible by careful admission systems. The inquiry at the admission desk should include question as to place or agency of previous treatment.

(b) **REFERENCE OF PATIENTS**—Patients recently under treatment at one dispensary and not specifically referred to another for consultation, should be referred back to their former place of treatment, except when satisfactory reason is found to exist for the transfer. The same policy should of course be pursued when a patient has been under treatment by a private physician.

The use of printed or written slips of reference is of practical service.

(c) **DISTRICTING**—The limitation of the work of each dispensary treating the sick to a definite area is not practicable, but patients should be encouraged to seek treatment in the section of the city in which they reside or have their place of business. Well administered admission systems at each dispensary and a common understanding of policy, worked out by the proposed central committee, should reduce to a minimum problems of duplication and of overlapping of areas.

Dispensary Administration

Essential points of organization are presented in the sections on "Organization for Service" and "The Medical Profession and the Hospitals," and will be merely recapitulated here:

An executive head for the dispensary.

A medical organization which is integrated with that of the hospital.

A dispensary medical committee.

A dispensary committee of the board of trustees or, if the board has not a sub-committee system, one or more members of the executive committee who have special responsibility to be in touch with the dispensary.

The dispensaries of Cleveland would do well to develop carefully worked out systems of referring patients from clinic to clinic within the dispensary, for consultation purposes; and for transferring patients for treatment from one clinic to another, with due report back to the referring or transferring clinic.

The important place of the social service department in dispensaries is outlined in the section devoted to social service.

Medical Care of Children in Foster Homes

This has received little attention from the medical agencies of Cleveland, and the Humane Society itself has not dealt adequately with its responsibility in this matter. As Dr. Mac Adam's report shows, in another portion of the Survey (Part II.), the physical condition of the children boarded out by the Humane Society is far from satisfactory. Moreover, the Society's records do not show adequate medical supervision of its children, and indeed the system which it pursues would render adequate medical work quite unlikely. Even in the case of the children under three years of age, which are within the special province of the Babies' Dispensary and which are supervised thereby in behalf of the Society, results are not satisfactory. This is largely because of the lack of a really intimate affiliation, which is required for the successful conduct of any such piece of work. It is essential that the physicians of any dispensary which is served in such a capacity shall think of the special problems of a placing-out society, as well as of the physical needs of each individual baby. The social workers and nurses who are in touch with the foster home need special explanation of the child's needs in terms that they can understand, and the foster mothers need instruction not only from the field workers but also, from time to time, from the physician himself. Moreover, the administrative system of the dispensary must be specially adapted to this work for the placing-out society. Delays must be minimized and records and information be readily and promptly secured.

In the case of the older children, present conditions are still less satisfactory than with the babies.

Satisfactory results cannot be expected unless the Society has a Medical Director, who should be a specialist in pediatrics, and be responsible for the medical standards and policies of all children under the care of the Society. This director should be a member of the staff of the children's clinic of a dispensary with which the Society makes a working arrangement for the initial examination, re-examination and much of the interim supervision of the children's health. Preferably he should be also on the staff of a hospital with a pediatric service so that sick children requiring hospitalization could be still under his care. There are substantial advantages in utilizing for examination and supervision the equipment, organization and the group of specialists of a well managed dispensary, instead of a number of doctors in separate private offices. The systems worked out in Boston, by cooperation between the Children's Aid Society and the Boston Dispensary, and in Philadelphia by the Seybert Institution, could be studied to advantage as illustrations of method.

It is important that there shall be not only intimate coordination between the medical authority of the Humane Society and the medical agents and agencies doing the actual work, but also that the nursing and social service staffs be in similarly close touch. Without this, satisfactory results cannot be expected. The medical workers and the field workers must understand one another and the system under which each group works must be mutually adapted to achieve the needed degree of mutual understanding.

It is recommended that:

1. A medical director, a pediatrician, be appointed by the Humane Society, with a financial honorarium, as the authoritative guide and supervisor of the physical condition and development of all its children.

2. This director be a member of the staff of either the Babies' Dispensary or of the proposed central downtown dispensary (Pediatric Clinic), whichever the Humane Society decides to be the better organization for such affiliation.

3. Routine medical examination, re-examination, advice and supervision of health be carried out through the selected clinic, a special salaried medical assistant being requisite for the purpose. The Humane Society should provide this salary.

4. Standards for medical examination, hygienic directions, diet, re-visits, home care in emergencies, etc., be outlined by the medical director.

5. Consultation by the specialists in other departments of the selected dispensary (eye, dental, throat, ear, skin, orthopedic, etc.) be provided as requested by the medical director; treatment also as necessary.

6. The use of the local doctors and of specialists in private offices be reduced to a minimum; that reports from such physicians be required and made part of the central medical record.

7. A special worker be in the selected pediatric clinic, under the administrative direction of the clinic, but with salary wholly or largely from the Humane Society, to attend to the details of assisting in securing examinations and consultations; in effecting transfers; keeping track of needed re-visits; and seeing that the necessary information is furnished by the Society to the clinic doctors and workers on the one hand, and by the clinic to the field workers and foster-mothers on the other.

8. Periodic conferences between the medical director and his assistant or assistants, be held with the clinic worker and the field nurses and social workers who deal with the Society's cases.

9. The records of the clinic concerning each child be regularly furnished the Society and the clinic be provided by the Society with such history of each case as the medical interests require. Record forms should be especially prepared for this purpose.

10. The present system of utilizing public health nurses for home visiting of placed-out children be continued and made much more effective through (a) the centralized medical direction contemplated in the plan (b) the closer medical supervision provided for in recommendations 3, 7 and 8.

If the Babies' Dispensary will increase its age limit and render its organization sufficiently flexible and adaptable to meet the requirements of efficient service to this group of children, it would be desirable that the plan be worked out by the Society in cooperation therewith. The establishment

of some special clinics as well as the general pediatric clinic would be necessary, as the Survey has recommended in its special report to the trustees of this institution. If the requisite conditions cannot be met at the Babies' Dispensary, it is recommended that the central downtown dispensary be utilized.

It should be pointed out, in conclusion, that while the proposed plan for adequate medical supervision of placed-out children will cost more than the present admittedly inadequate system, the expense of the medical work is after all only a small fraction of the total cost of boarding and general supervision of such children. Very little permanent result for the present or the future generation can follow from any system of children's aid which does not make the thorough and efficient care of health a primary consideration.

DISPENSARY NEEDS OF CLEVELAND

Aside from the public health dispensaries for which recommendations were made in the previous section of the report, the dispensaries for the treating the sick of Cleveland universally need improvement in various respects. Recommendations regarding each institution have been presented to its governing body by the Survey. In general, the needs may be summarized as: (1) more work to be done; (2) better executive direction through the assignment of a definite officer to be in charge of the dispensary, under the superintendent; (3) representation of the out-patient department so as to secure better recognition of it by the hospital authorities; (4) paid assistants for the medical staff (social workers, nurses, clerks) so as to relieve the physicians of non-medical drudgery and improve the grade of service to patients; (5) better records which, would largely be accomplished by the assistants just mentioned; (6) better plants and equipment.

The expense involved in the improvement of services lies chiefly in the salary of the paid assistants mentioned, and would be largely met by the admission fees recommended.

An increase in the amount of dispensary service for the people of Cleveland is as greatly needed as is an improvement in the quality of service now offered. It may be expected that the work of existing dispensaries will increase considerably as more attention is paid to their needs, and better support is provided. But no increase in the work of the six present institutions can obviate the necessity of at least the following additional dispensaries:

The City Hospital out-patient department is already provided for in the tentative plans for the enlarged City Hospital. It should be one of the major dispensaries of the city. (See section on "Community Planning").

St. John's Hospital should, as soon as possible, develop a good-sized out-patient department for the benefit both of the hospital and of the west side area which it especially serves and which now has no dispensary.

When the re-organization and development at St. Alexis Hospital have been worked out under the new advisory committee, the establishment of a

well-equipped out-patient department should be undertaken and this need should be borne in mind by the committee even in the formulation of its plans for the immediate future.

The establishment of an out-patient department, now being built by Fairview Park Hospital is approved, although this dispensary will probably remain small and its work restricted largely to certain types of cases, particularly surgical, corresponding to the work of the hospital.

The same would probably be true of similar out-patient departments that might well grow up in connection with other hospitals of the same type in the same section of the city, such as Grace Hospital or Lutheran.

The plans for the re-location of Lakeside Hospital imply a new dispensary, attached to its new plant. This should be another of the few major dispensaries, as described in the community plan, in the section on that subject.

The proposed new plant of St. Luke's Hospital will require a dispensary, unless the present buildings or parts thereof, are retained as an industrial hospital, and a dispensary be operated in connection therewith. The latter plan is recommended.

It is not believed that the proposed new plant of Huron Road Hospital on Ambler Heights will require a dispensary for some years to come; but Huron Road might with advantage have at least a medical affiliation with the proposed central downtown dispensary. (See section on downtown dispensary.)

A new dispensary will be needed downtown, at least as soon as Lakeside and Huron Road move out, and meanwhile, certain services for the downtown area need immediate development.

Cleveland, like most other cities, suffers from lack of any general plan for dispensary service. The different clinics are not coordinated with one another or with the public health and charitable agencies. It is essential to have a plan and effective organization whereby the work of existing dispensaries shall be improved and the new dispensaries be established in sections of the city now unprovided for. But above all, the aim must be to furnish a basis upon which dispensary service should be better understood by the community and better serve the community. The points of view of the practitioner of medicine, of business, and of charitable agencies, of the men, women and children who need adequate service and cannot pay for it, and of the public as a whole, represented by the city government and organized agencies for expression, all need to be considered in framing any forward-looking project of this character. The preventive and educational work of the health centers must be adjusted in conjunction with the curative medical work of the hospital out-patient departments, so as to be mutually helpful and to serve as parts of a developing city plan.

It is necessary—

(a) To create some group of people or machinery whereby the dispensary problems of the city can be viewed as a whole, each particular dispensary or related agency be brought into touch with the larger problems, and the larger problems themselves directly and adequately dealt with.

(b) To have dispensary work rest upon its own financial basis—the financial support of dispensary service being provided in terms of and in proportion to such service, and not merely as a part of hospital or medical work in general.

It is therefore proposed:

1. That there be a Dispensary Section or Committee of the Hospital Council—this committee or section to include representatives from each of the existing out-patient departments of those hospitals which are members of the Council; and also representatives from the Department of Public Welfare, the Cleveland Academy of Medicine, and persons interested in visiting nursing and charitable agencies.

2. That there be a salaried executive officer for this Dispensary Section or Committee of the Hospital Council. Such officer at first might be required only for part time and in that case had best be selected from some organization other than one of the privately operated out-patient departments.

3. That the Cleveland Welfare Federation require the presentation of request for support for the out-patient departments of hospitals to be made separately from the request for support for hospital work proper; such requests to show the work done by the dispensary, the cost thereof (including a fair allowance for overhead) and the income of the dispensary from fees paid by patients or from other sources.

In view of the general importance of dispensaries to the community, and of their special service as the “family physicians” of the non-medical charities, the Welfare Federation should appropriate monies to dispensaries (the out-patient departments of hospitals) on the basis of reports of (1) work done, (2) gross expenses incurred, (3) net expense after deducting all dispensary income from fees, special endowment, etc. This would mean a consideration of the annual dispensary budgets as separate parts of the budgets of the hospitals to which the dispensaries are attached. It would cause appropriating, supervisory and administrative bodies to give much more attention to the dispensaries, which have too often been regarded as merely incidental elements in a hospital.

Cleveland ought to have at least three times as much dispensary service as it now has. In from three to five years this goal can be attained, through the enlargement and improvement of existing dispensaries and the addition of new ones at the City Hospital and on the west and south sides. The gross cost of adequate dispensary service to Cleveland, at present costs of

maintenance, would probably be over \$300,000 annually. The present gross cost is not over \$75,000 (charging in all overhead). The difference is due partly to the limited amount of work and partly to low standards. It should be expected that when proper fee systems are developed, 50 per cent. of the gross cost should be met by fees from patients.

It is thus contemplated that the Dispensary Committee or Section of the Hospital Council should be an expert advisory and planning body, serving to improve dispensary standards and administration of the several institutions; to work out the larger problems of policy and inter-relation, and to serve also as an advisory body for the Welfare Federation, as the Hospital Council now does. The financial standing given to dispensary work by the proposed action of the Welfare Federation would be essential if dispensary service is to stand on its own feet.

No such Dispensary Section or Committee could be effective unless some finite salaried executive assistance is provided.

More and better dispensary service is one of the important medical needs of Cleveland. The Hospital Council and the Welfare Federation should recognize it as such.

THE CENTRAL DOWNTOWN DISPENSARY

The central downtown district of the city presents needs for medical and health service which are now not met, and offers certain unique opportunities for rendering many forms of service. Huron Road Dispensary is excellently located, but the present dispensary is very small, and is in cramped quarters which permit but slight expansion, while the hospital continues as at present. Lakeside Dispensary, while not as well located, though still fairly accessible to the central downtown area, has far more possibilities, but as yet has not measured up to its opportunities. The moving out of both of these institutions will require either the retention of one plant as a central downtown dispensary, and the maintenance in this plant of needed forms of service not now provided, or the establishment of a new plant.

In the first place, it is desirable to state the needs to be met. The central downtown district of the city requires dispensary service within its own area for at least four reasons:

(a) Emergency and industrial surgical work arising from the large daytime commercial and industrial population of the central area of the city.

(b) Many special forms of medical services which for the public welfare should reach as many persons as possible, and which in the downtown area can be brought to the attention of the large daytime and evening population which throngs this district for business or recreational purposes. Clinics in this district held at certain hours of the day, for instance at luncheon time and in the evenings, would reach large numbers of persons who are practically inaccessible otherwise. Tuberculosis Clinics, Venereal Clinics, or Mental Hygiene Clinics, are examples.

(c) General medical and also special services such as are provided by general dispensaries, ought to be available to this transient population of the central area (as well as to its residents) at hours and under conditions which would make it possible to have these services most effectively used by those who most need them.

(d) This dispensary would serve charitable agencies, providing medical examination and supervision for the families under care in the central district, or who have to be brought to this district to the society's offices. Cases requiring elaborate study or special treatment would be referred to one of the major out-patient departments.

The downtown dispensary is required for a larger reason. If properly organized and made a real center of a variety of health and medical activities such a downtown dispensary would serve as an important educational center along general health lines, assisting the work of many other agencies, not only as a point from which patients would be referred but also as a center of public health education.

Such a dispensary would include:

(a) A clinic for industrial surgery operated throughout the twenty-four hours. Such a clinic would require special arrangements for its professional services and be administered so that patients could be admitted without delay, although the clinic might be closely related to the other dispensary services in the same building. The need for such an industrial clinic has been brought out in Part VII. of the Survey Report.

(b) A Health Center of the City Division of Health maintaining (1) a tuberculosis clinic, with a special consultation service at periodical intervals, (2) venereal clinics, and (3) a division for health education, which should include among its activities the conduct of a clinic for the examination of well people—children and adults. It might perhaps be best to maintain the venereal clinics under private auspices. (See Part V.)

(c) A mental hygiene clinic.

(d) A general medical clinic for the examination and treatment of sick persons.

(e) Special clinics, such as eye, ear, nose and throat, and surgery, (other than industrial surgery).

(f) The "Orthopedic base" or "center" recommended in the orthopedic plan, (Part II of the Survey Report), should be in the same building. Its work would assist all the other branches in the downtown dispensary and would be assisted by them. This orthopedic center would include, besides certain administrative functions relating to the orthopedic plan of the city as a whole, a physical treatment center which would be of city-wide value and would be especially advantageous if located in this central district.

(g) The affiliation of this downtown health center with the University is highly desirable.

It has been pointed out elsewhere that there is needed a certain small number of hospital beds (20 to 50) in the central downtown area, largely for emergency purposes. This emergency hospital or "relief station" could with advantage be combined with the central downtown dispensary.

If both Huron Road and Lakeside Hospitals move to their new sites within a few years the proposed dispensary and the emergency beds will be the more urgently required. The plant of Huron Road Hospital appears to be suitable, with relatively slight modifications, for the combined purposes of emergency beds (30 to 40 in number) and the downtown dispensary. The location is almost ideal. It might be well for Huron Road Hospital, as well as for the public good, that there be a medical affiliation between the Huron Road staff and the dispensary staff; but the problem of staff for the downtown dispensary might be solved in other ways.

The industrial surgical clinic should be fully self-supporting, from the industries which it serves and from the workmen's compensation cases. The

staff of this division should be salaried. The senior visiting staff would provide certain supervisory and consultant advantages.

The public health clinics of the dispensary would constitute an additional Health Center of the city Division of Health, and would require the necessary addition to its budget. The mental disease and mental hygiene clinic should be maintained, at least at the start, by the organization especially concerned with this interest. The orthopedic clinics and physical treatment center should be supported likewise by the orthopedic group referred to elsewhere in the Survey report (Part II.)

The Community Fund would properly be called on for the financial support of the general medical clinics for adults and for children, and for the special clinics which are required. Not only as meeting a general public need and a broad purpose in health education, but also as assisting charitable societies to secure better medical examination, advice and supervision for their beneficiaries, the central downtown dispensary has a peculiar demand upon the Welfare Federation. This dispensary, among other benefits, would make money spent for many other charitable agencies count for more.

In estimating the cost of this dispensary, it must be borne in mind that the medical staff in all clinics should receive financial compensation, except for merely consultant or infrequent visiting services. The gross maintenance expense of conducting the industrial surgical clinic, public health clinics, general medical, pediatric and special clinics, with a used capacity of 50,000 visits a year, should not exceed \$60,000. Deducting the cost of the industrial and the public health clinics supported by industry and by the city, respectively, the gross charge upon private funds would be about \$35,000, of which some \$15,000 might be expected to be returned through fees from patients. The net charge should not exceed \$20,000 a year.

It is apparent that the initiative in putting this dispensary under way must come from some privately organized group having a special interest in the matter. It is recommended that shortly after the proposed Central Dispensary Committee has been organized, this committee initiate discussion of the matter and call together a conference of such individuals and interests as may be necessary. Some one committee or organization would have to assume definite responsibility for the plant. This committee might be a joint body of the organizations providing various services, or a more specialized body which made arrangements with the other groups to use the plant for certain purposes at specified times. The plan will be restricted in its service in proportion as few activities are included, and will be broad and far-reaching as the number of activities and interests is increased, always assuming their harmonious coordination. The combination of the public health and preventive clinics with the curative clinics, for instance, is of vital importance.

It would not be unnatural that Lakeside or Huron Road, particularly if their moving plans are delayed, should suggest that their present dispensary be the basis of the proposed central dispensary. Such a plan is not impractical, provided there be sufficient flexibility and readiness for cooperative

adaptation in the existing organization which is made the basis. It will be well to remember that such a central dispensary represents a Health Center in a somewhat advanced sense of the term; that it might ideally contain administrative offices of public and private health agencies, meeting rooms and auditoria for public health education; and stand before the people of the city as a visible expression of the communal interest in health. Through its own activities, in which curative and preventive functions should be correlated, and through its connections with the Central Dispensary Committee, the municipal health work, the business, educational and philanthropic interests, the proposed dispensary might be a constructive force as well as a service to many individual lives. Only by grasping the possibilities of the project in the future can any institution or any committee justify an assumption of responsibility for its leadership in the present.

IV. Special Problems

THE CONVALESCENT AND THE HOSPITAL

By MARY STRONG BURNS, R. N.

INTRODUCTORY NOTE

Mrs. Burns, as a member of the staff of the Survey, presents in this chapter a study of convalescent patients recently discharged from the hospital. Few if any cities have as yet met adequately the need for convalescent care. The most notable work in the country is that of the Winifred Masterson Burke Foundation at White Plains, New York, under the direction of Dr. Frederic Brush, whose significant contribution as collaborator in the Cleveland Hospital and Health Survey will be found in the next chapter. The bulk and general bearing of the convalescent problem in Cleveland is discussed in that place.

Mrs. Burns' contribution is a series of vivid pictures of what may happen to patients after they leave the hospital doors, and drives home the point that a sick man's sojourn in the hospital is only one stage in the journey between illness and health. Too easily does the hospital forget this truth. Too often do hospitals in Cleveland as elsewhere feel or at least act as though they felt that their responsibility ended when "discharged" is written on the record and the patient is no longer within the building.

The care of convalescents is a much larger problem than that of a hospital or institution for convalescents. The bulk of convalescence takes place in the home, and particularly in medical cases, the whole course of the illness, from onset through acute stage, convalescent stage, and final restoration to health and vigor, may take place within the home. From this broader standpoint of the community, the convalescent problem is approached in the following chapters.

In Mrs. Burns' study emphasis is laid upon the hospital patient and his need after discharge. Her very practical recommendations should be compared with what has been said in the chapter on the Human Problem of the Hospital Patient, with reference to hospital provision at the time of discharge and the use of the dispensary therewith.

A STUDY OF HOSPITAL CONVALESCENTS IN THEIR HOMES

In attempting this study two things were very quickly apparent: (1) that convalescence is as much a state of mind as of body, and that environment which does not provide for the needs of both is inadequate; (2) that the background of convalescence is laid, the texture of it stretched and woven, while the patient is still lying abed in hospital. His mind is a sensitive shuttle threading with tireless insistence every impression of the hospital ward, whether grave, radiant, trivial, or profound, and coloring each with his mood of the moment. On the "date of discharge" (when shall we find a more gracious phrase?) the patient takes this mental "sampler" and during the time that he must "remain inactive" as the house physician says, he wonders over it all. If left to himself he makes few alterations in this plan of return to health which the hospital has spread

out for his interpretative copying. Every impression is traced and retraced and his conception of health and of his part in holding it is framed in his idea of hospital service and remains pictured as a never-to-be-forgotten experience.

In seeing over two hundred such "pictures" one could often exult that the hospital had been interpreted favorably and with gratitude. When the interpretation had been distorted through mutual distrust and misunderstanding, regret was always followed by the conviction that a broader conception of the hospital's responsibility was possible, indeed necessary, and that it would more and more make the way straight for patient and hospital alike. Two points of view will illustrate: (1) A Polish woman, after three weeks in a hospital ward, thus voiced her opinion on the Hospital Bond Issue, "She is like a great and wonderful mother who cares for many sick children, this City Hospital. If more money she needs let us say yes and give." (2) A man sensitive at being temporarily without money bitterly resented the hospital's attitude that he should pay his bill there because he had hitherto paid his private doctor, "Why would they think I should go to that place if I could any longer pay a doctor? Would anyone go who did not have to? I burn with shame when I think what questions they ask."

Thus convalescence is the state of mind and body on which the hospital may set its stamp as a friend and helper or as an autocrat without sympathy. The real service to the patient is but half done on the date of discharge. The test then comes, to decide whether the final stage of convalescence shall be to each of its patients a stimulating, worth-while experience or a lonely and difficult task to be faced against great odds.

The cases studied were two hundred discharged patients from four of the principal hospitals of Cleveland: Charity, City, Lakeside, and Mount Sinai. They were nearly all classified as free or part-pay patients. A few had apparently paid the full charge for treatment. They included a variety of foreign nationalities, of which Cleveland offers many: Armenian, Australian, Bohemian, Chinese, Greek, Italian, Lithuanian, Polish, Slovenian, Swedish, etc., a number of native American whites and a fair proportion of Negroes. The environment of patients seen ranged from that of wretched housing and extreme poverty to the completely comfortable house of the well-to-do.

The types of illness from which these patients were convalescing were contagious and general diseases, surgical operations and accidents. There were also a few maternity cases. Their length of stay in hospital varied from five days to two months.

Half of the cases were seen within three to four days after discharge. The others were seen within ten days after discharge with the exception of six surgical cases who had been told not to resume work for four weeks.

In the homes the reaction of the hospital upon the patient was noted: (1) whether the diagnosis and medical advice had been understood, and was being followed with satisfactory results; (2) whether assistance of any sort

would more certainly assure the result for which the hospital had worked. In a word, was the best sort of convalescence possible for that particular patient in that particular home?

The convalescents seen were classified as follows:

Cases with Home Environment	Total Cases	Total Per cent.
1. Favorable and adequate.....	25	12.5
2. Favorable with minor adjustments, economic or personal.....	71	35.5
3. Unfavorable but remediable by economic or other assistance.....	48	24.0
4. Unfavorable and not remediable, needing institutional care in convalescent homes	44	22.0
5. Acutely needing further hospital care — relapse after return from hospital.....	12	6.0
	200	100.0%

59.5 %

87.5%

28.0%

Thus, with only 12.5 per cent. in surroundings favorable and adequate for convalescence, the remaining 87.5 per cent. of these cases returned to homes which were unfit in varying degrees for their convalescence. With proper advice or assistance, conditions could have been remedied in about two-thirds of these cases (59.5 per cent. of the total number) while with the other third (28 per cent. of the total number) conditions were irremediable and the patients required institutional care in convalescent homes or still longer care in hospitals.

Charity Hospital

Considering the convalescent cases of each individual hospital as a group, those of Charity Hospital presented the following distinctive characteristics:

Cases with Home Environment	Total Cases	Total Per cent.
Favorable and adequate.....	15	30.0
Favorable with adjustments.....	21	42.0
Unfavorable but remediable.....	6	12.0
Unfavorable and not remediable.....	6	12.0
Acutely needing further hospital care.....	2	4.0
	50	100.0%

As permission was given to choose the patients from the complete files of those discharged there were by chance more pay or part-pay patients and among these were people of intelligence and personal capability who

en able to adjust their homes to provide adequately for convalescence. and sometimes been accomplished by pre-arrangement, before going to hospital, with some competent friend of the family who possessed special mental or moral force needed for the situation. (It was noticeable that this force was as often absent in the more prosperous homes as in those of otherwise discouraging surroundings.) Practically no form of nursing service had been offered to this prosperous type of patient, but the patient's evident appreciation of the idea as a possibility was impressive.

The prevalent feeling among the 82 per cent. of operative cases among whom it was that they had had the benefit of wonderful surgery, but were weaker than before the operation as to what had been the matter with them or what was to be done to prevent further difficulty. The "head doctor" or attending surgeons were described with awe, yet regret, as "important to be bothered"; "he's so busy he can't listen"; "it seems to be the kind of a man to give you much talk."

A gynecological case returned to her home without instruction from the hospital, and within two weeks had housecleaned her tenement, painted the walls, papered two rooms, and was doing the cooking under a sloping range too low to allow her to stand upright at the stove. The doctor having told her she was "all right," she did not understand how she felt worse than before the operation. Concluding it was all a failure, she had begun to treat herself with Lydia Pinkham's remedy because the newspapers said it would help anyone who felt as she did and she didn't want to waste any money on the hospital.

Another operative case returned weak and wondering why the old pain was just as bad, while all she "could get out of the nurses and doctors was that they had gotten what caused the trouble." Still another, in a wretchedly filthy tenement, lay abed, mystified at feeling worse than before, while the family questioned her, "What happened? Have we paid 36 for this?" The cost in money loomed larger than any visible loss in health.

Among the women who were uninformed as to their condition only one had been told to know. At seventy years she was tranquil and not inquisitive.

Men also had doubts. A neurasthenic, aggrieved at the little attention bestowed upon him at the hospital, had gone home to a combination of massage, electrical treatments and doses of No. 99 at Doctor Simpson's Medical Institute. His protest was, "Why didn't the doctor say what would do me some good?"

Another came home to wretched lodgings from a long siege of lead poisoning, pneumonia, and an operation for empyema. While he was expecting that the incision had been allowed to close too soon because the hospital was short of beds, the doctor who had sent him to Charity Hospital came to take him to St. Alexis, there being a vacant bed where the doctor who had operated first would open up the incision.

A man, whose money was low after seven weeks in the hospital, was travelling a distance of seven miles for dressings because he knew a doctor who would not charge much.

A sturdy Irishman with facial paralysis after a mastoid operation was embittering his days with thoughts of suing the hospital, while his wife wailed, "Sure, they have destroyed him entirely. 'Twould draw tears from a stone."

The White Motor employes who after leaving the hospital were cared for at the dispensary of their works, seemed well informed except in the case of one man. A dressing of his foot had not been changed for four days. Having been told that he was "all right now," he had taken this literally, until the pain and swelling led him to doubt. He had recently been burned out of his home, and as the only support of a wife, mother, and five children under twelve years, had gone on a ten-hour night shift to get the extra pay of \$11.85 a day. He was slowly coming to the conclusion that his foot, by its delayed recovery, was costing more than his hospital bill.

SUMMARY OF CHARITY HOSPITAL CONVALESCENTS—Since hospital service dominates convalescence to such a degree that it has no present but only a past, these cases have indicated: (1) That more nursing care, if only for its educational value, and better night service, particularly for men, should be offered. (2) That more time should be given to instructing all types of patients as to their part in carrying on convalescence, returning to dispensaries or physicians, etc. (3) That after-care in the homes is often indispensable. (4) That there should be more real interpretation through Social Service of the problems of foreign-born patients, so that "Tony" would not have felt it possible to get out of bed and walk off without saying, "By your leave." (5) That the cash value of health should be explained to those patients who reluctantly offer their fees. With the help of Social Service every patient should be made proud to contribute his charity to the common good.

City Hospital

City Hospital presents the following showing:

Cases with Home Environment	Total Cases	Total Per cent.
Favorable and adequate.....	5	7.0
Favorable with minor adjustments.....	19	26.8
Unfavorable but remediable.....	21	29.6
Unfavorable and not remediable.....	20	28.2
Acutely needing further hospital care.....	6	8.4
	<hr/> 71	<hr/> 100.0

The large portion of those having unfavorable and irremediable surroundings corroborated the superintendent's statement that almost half of

their patients have no homes and must be kept in hospital until ready for work, the only alternative being the Warrensville Infirmary.

Even a superficial contact with the various types of lodgings, rooming-houses, and rooming hotels, with their forlorn attempts at light housekeeping, brings swift conviction that they can never offer a fair chance to convalescents. The atmosphere of isolation, the indifference as to what happens to the lodger after he pays for his room, the long flights of stairs to be reckoned with whenever a meal is needed—these, aside from the unwholesome living conditions, proclaim the lodging system as “fatiguingly futile” for convalescent use. The patients themselves evidently realize this fact and many did not return to their given address. Others had never lived at the given address, but had been known to the owner of the lodging house or to some of the lodgers. A few gave an impossible street number selected with evident care. The Salvation Army, the City Mission, a corner store, or a former saloon will sometimes be given as an address where nothing definite could be remembered of the patient. One man was found on the corner near the restaurant which he had given as his address and explained there was “generally some one round that corner who knew where he hung out.” Such were the frail links to home and the greater reasons for convalescent care in institutions or at least for continued hospital supervision.

Another tremendous claim for convalescent supervision of the most far-reaching and efficient sort was made by the fact that many other patients came from *homes* which were totally unfit for convalescence or continued health, unfit for the minimum requirements of normal living—on the edge of the dump, in gullies thick set with smoke, in leaky shacks—the cracks stuffed with newspaper and the room reeking with kerosene fumes, in dark tenements, four or five of which would open on a court filled with the accumulated refuse and garbage of the winter, where the convalescent child was left to “play.”

The hopeful note in many instances was the persistence of the family in keeping its tenement clean within in spite of the disheartening mess without.

In several such homes on Orange Avenue there was as keen an interest and sense of personal concern in the Survey of the Hospital Council as at a Chamber of Commerce meeting, thus bearing out the idea of Doctor Frederic Brush on convalescence that “health service should be offered where people live and work and play.* * * Of abiding value in this period of convalescence is the process of *normalizing*, in all ways which may hold throughout life.”

It is hard to prove which will finally claim the most patients, the influence of the hospital or that of the home on the edge of the dump beset by every health hazard and bereft of every help to sanitation, but it is only when Social Service shall present overwhelming evidence of the limitation of hospital skill before such handicaps that these entirely eradicable conditions will be swept away.

The surgeon, who has conscientiously given his intelligence and skill to renew life, should realize that the condition of the home to which he is send-

ing his patient, will play a vital part in the final success of his work. To have a mind to insist that dwellings and their surroundings should be fit for the minimum requirements of ordinary living would be to open up many possibilities in home convalescent care which, as yet, are untried, and the importance of gain in the general health of the community and in health education, should not be overlooked.

Still other types bespeak the follow-up work of the hospital. The drug addict, returning to lodgings with little moral support; the child with chorea celebrating her home-coming with a "regular meal" of coffee, sausage and pie; the heart case who has spent most of his small life in hospitals and pleaded, "Oh, Muz, my business is always hospitals! Can't I stay home and get well?"; the fourteen-year-old runaway with mumps whose pride had thus resented his being put in the "kids' ward" where his feet stuck out through the bed-bars; the child of five whose mother had never been able to find out from the hospital what its illness had been—these and many others proclaimed their necessity for further care without which a large part of the hospital's work goes for naught.

SUMMARY OF CITY HOSPITAL CONVALESCENTS—These cases present the following well-defined needs: (1) Increased institutional convalescent care; (2) Instruction of patient at discharge; (3) Social Service, to adapt the homes of patients for convalescence therein.

Lakeside Hospital

Lakeside Hospital showed:

Cases with Home Environment	Total Cases	Total Per cent.
Favorable and adequate.....	4	7.0
Favorable with minor adjustments.....	21	36.8
Unfavorable but remediable.....	14	24.6
Unfavorable and not remediable.....	16	28.1
Acutely needing further hospital care.....	2	3.5
	<hr/> 57	<hr/> 100.0

The cases were offered with ample records and in the spirit of the fullest cooperation. Probably because of this it was more noticeable that the instructions to patients by the doctor were most often "none in particular" or "return to dispensary."

The "none in particular" probably indicated that to the doctor the case did not stand out in his mind as needing any instructions other than those of routine convalescent care after a pneumonia, a laparotomy, or whatever else the disease or operation might be. The patient, however, assuming this role for the first time, finds everything strange about being "a pneumonia" and things stranger still as "a laparotomy." He is full of interest in himself. He wants to make a success of getting well and there are many questions to

which he wants to know the answers. He is hoping there will be time for one of the doctors to have a talk with him about it all before he leaves the hospital. But often the last day comes unexpectedly, his bed being needed for a more urgent case, and he finds himself at home several miles from the hospital, wondering why he managed to find out so little of what the hospital knew so well. When special instruction had been given the patient on discharge, the effect was almost magical. To have been instructed to carry on what the nurses have begun, to have responsibility for one's own treatment, gave a new zest and importance to convalescence. Particularly was this noticeable in patients who were returned to the dispensary for the treatment of syphilis. Alert and intelligent, they were too much in earnest to be self-conscious and presented convincing evidence of wise and inspired teaching. With the exception of these cases there was little evidence of hospital Social Service other than visiting nursing among the patients seen from Lakeside.

The ambulance experiences of many held a large share in their convalescent thoughts. The negro who, after an automobile accident, regained consciousness in "Hogan's dead wagon," "don't never expect to get over that wake up." He thought he was being taken to the undertaker's establishment as dead. Often neighbors have "chipped in" to collect the money for an invalid carriage so that the police emergency need not be called, and with a naive idea of gradual descent to the mundane, some announced that in leaving the hospital, they took a taxi to the nearest car-line and transferred to the trolley for the rest of the way home.

Another impression noted among the women was remembering the fatigue of that first complete dressing to leave the hospital. Apparently this was often done without assistance as the nurses had other duties and the friends of the patient were not allowed to come to the ward. (This was also noted in patients from other hospitals. An old negro woman with an aortic aneurism was being sent home from the City Hospital on the ambulance stretcher. She described the fatigue of preparation and added "The head lady nurse told them, 'Don't bother if it is a hospital gown—let her go while the spirit is in her.' I sure was grateful. She certainly had wisdom, that lady nurse.")

Two other shadows of convalescence were: (1) the long uncertainty and final disappointment over the amount of the hospital bill, and (2) the fact that patients sometimes came away resentful because they had been the "interesting case" used to teach others. They felt that they were being detained in hospital for this purpose.

These may seem minor details in the immense and complex scheme of administration which the hospital must embrace, but with the sensitive imagination of one half sick—"behold, a little cloud ariseth" and the whole of his convalescent sky is darkened.

The amount of the bill could be approximately decided before the day of discharge and preferably nearer the day of admission so that this "indeterminate sentence" might be cleared up. If the patient has not been able to

pay, it is perhaps not the happiest sort of *envoi* to have "the last one you see at the front door saying, 'I hope you will be able to work soon and pay your bill.' " Social service at the front door might perhaps have given the deft touch to incentive which would have brought the patient to say as much *for himself*, with gratitude and courage.

Again, in the matter of the resentful "interesting case" the house physician who is a vital influence for energizing convalescence, could in a few words, with perhaps a touch of camaraderie, present the idea of an impersonal yet chivalrous appeal for humanity, and the patient might become at once the "*interested* case," ready and a little grateful to contribute to the advancement of clinical medicine and scientific research.

The foreign-born patients who had had bedside lessons in English in the hospital and who had heard their own language understood and translated by a sympathetic interpreter, beamed with appreciation at the remembrance. This happy cooperation with the Board of Education can be developed so that the often empty hours of convalescence will be brimming with interest.

SUMMARY OF LAKESIDE HOSPITAL CONVALESCENTS—Almost without exception the Lakeside cases showed that the completion of the hospital's work can only be accomplished outside of the hospital and through the extension service of social work.

Whether this is rendered in the guise of institutional convalescent care or of home service, there is every indication that the expense would be less than a protracted stay in the hospital. The patients are quick to testify that after the first urgent need of acute illness the hospital atmosphere is not helpful. Its ceaseless movement is too intense and vivid for rest.

To the patient with a problem waiting at home, institutional convalescence, however luxurious, has little charm—"For what good should I go away. The worry for the kids would go with me," said a mother amid a clutter of babies, washtubs and general disorder. "This is the best for me here." Her peace of mind arose triumphant over the scene of distraction, for her problem was within her grasp.

The unanimous opinion among such convalescents was that any help in household administration would be welcomed.

Mt. Sinai Hospital

The cases referred from Mt Sinai came to the investigator slowly and were possibly a more or less expurgated edition, as there seemed some apprehension lest the hospital's social work should be duplicated. Maternity cases were excluded. For this reason the number of cases for consideration was smaller than from the other hospitals, only thirty-five being offered. Of

hese thirteen were not seen, leaving the following percentage compiled on a basis of the twenty-two cases seen:

Cases with Home Environment	Total Cases	Total Per cent
Favorable and adequate.....	1	4.5
Favorable with minor adjustments.....	10	45.5
Unfavorable but remediable.....	7	31.8
Unfavorable and not remediable.....	2	9.1
Acutely needing further hospital care.....	2	9.1
	22	100.0

One characteristic of this group as a whole was that the patients seemed to have achieved a definite idea of the hospital's plan for them and their repeated trips to the dispensary were playing an important part in their convalescence. The majority were looking upon the situation as a business proposition without imagination. The evident system and efficient working of the ward routine had impressed them and they were ready to do what was required. They seemed less susceptible to untoward surroundings at home because of the definite goal toward which they were working. Possibly this unanimity may have been more evident because of the smaller number, but it was too marked to escape notice.

The Collected Groups

Among the patients of all four groups were some who had been treated at two or more different hospitals for the same or different causes—the patient, not having mentioned this in giving her medical history at the hospital because she did not know, or “was not sure how to tell it,” and thought “the next doctor would find out.” In large families the hospital affiliation was widespread, several hospitals having been used by three or four members, and experience meetings when all talked at once brought out a variety of hospital lights and shades. This suggested the possibility of extending the scope of the Social Service Clearing House to include on its registry cards a note of any dispensary or hospital care which the patient had received—the technical details to be furnished by each medical agency as the occasion arose, as the patient is often unable to give an accurate account of past illness or surgical operations.

The very prevalent protest of the women patients against being kept in ignorance of the nature of their surgical operations deserves a word. The patient wants to know how she stands physically, even if she faces a serious handicap, and she can the better adjust herself to meet it if informed. The hospital service which shirks, evades, or refuses this after-treatment so necessary to the peace of mind and progress of convalescence has put the hardest part of the operation and its results on the patient, and has missed its best chance of rehabilitation.

Why bother at all if the game is not worth the candle—if the work is not to be carried through to completion and the seal set upon restored health

and higher spirit? If the patient is well enough to worry herself about her condition she is well enough to know what she has to worry about. She will then be more willing to put aside imaginings and prepare to recuperate in earnest.

Those who have had the fertile experience of a perfect convalescence have realized that there is much to be learned from contact with pain and weakness and returning strength. The convalescent patient should be helped to find these values, to lay aside a few worries and to take on a few new aspirations for the future. Inspiring companionship may often be found in one's nearest neighbor with a wholesome philosophy to share.

In becoming acquainted with the convalescent in his own home we must let him state the difficulty of convalescence as he sees it, along with his own idea of rehabilitation before blocking the way with too many suggestions.

Often the patient must either resign himself to a reduced "health bank account" or remonstrate at untoward conditions; again, the uncertainty as to what his depleted strength is equal to, makes any definite undertaking precarious. This is no time for platitudes in words or actions. No "return to dispensary" slip will fill the need. Advice to "rest and take it easy" will not answer. Reinstatement into the type of life to which the patient is equal must be wisely planned and the very present helps of community life pressed into service, so that the thrill of ambition, the impetus to new life which rightfully belong to convalescence may not be entirely lost.

SUMMARY

Visits to two hundred patients discharged from the wards of Cleveland hospitals showed eighty-seven and one-half per cent. in home environment unfavorable for convalescence.

In two-thirds of these homes, conditions were remediable if adequate and adaptable Social Service could be supplied. This service is almost entirely lacking at present.

In one-third, conditions were not remediable, and care in a convalescent home was needed. With present resources it is impossible to meet this need. The hospital faces a choice of evils—it must either retain the patient, using a bed needed for a case of acute illness, or return the patient to a home unfitted to complete the cure.

Possible means by which the hospital may assist convalescence in the home:

1. Treatment and instruction in hospital towards securing the patient's confidence and cooperation—the instruction to include understanding of present illness and means of preventing recurrence.

2. Making with the patient a definite plan for his after-care and reinstatement into active life, and enlisting his best effort to carry out such a plan.

3. The function of the Social Service Clearing House might be broadened so as to include a record of dispensary and hospital treatment received by the patient, with names of institutions and dates. This record could be used by medical agencies concerned as occasion requires.

4. The function and value of the Convalescent Home, when suitable and available, should be explained to the patient as an opportunity.

5. Social Service (if a Convalescent Home is not available or desirable) should create the same essential values of convalescence in the patient's own home.

6. Teaching the patient while most receptive to suggestions—because of recent contact with the hospital technic of sanitation—how he may further the hospital's work to insure permanent good health. This would include the use of dispensary and other hospital resources, as well as of the family physician.

A patient thus successfully involved becomes a valuable field agent who will set forth the work of the hospital in terms of appreciation which his neighborhood will not fail to understand.

A COMMUNITY PROGRAM FOR CONVALESCENT CARE

An institution is not the ideal place for convalescence from disease. The home, when conditions are satisfactory, is the ideal place. The possibilities of home convalescence are only beginning to be dealt with. In the preceding chapter home convalescence was touched upon in relation to the hospitals, with reference to planning the after-care for the patient, instructing him or his family properly at the time of discharge, using the dispensary to provide medical after-care, and social service. The last-named function served either by the social service department of the hospital, or by cooperating agencies such as the Visiting Nurse Association or the Associated Charities, is a necessity. It should further be borne in mind that the aid of social service is not called for merely in homes of poverty. Much work needs to be done in middle class homes by the Visiting Nurse Association or by a representative of the social service department to give the necessary instruction and friendly advice about the details of home management, diet, hygiene, etc., without which the family will usually not carry out the necessary routine outlined by the physician. Cooperation with the employer or the industrial physician, is not infrequently of great importance. The vast number of medical cases which are cared for in their homes by private physicians, and which convalesce at home need such advice no less than do hospital cases.

In a word, the broad problem of convalescence involves private medical practice, the hospital, the dispensary, the Visiting Nurse Association, and social service in many branches. Many individuals and many agencies must share in creating better opportunities for both home and institutional convalescence than now exist in Cleveland. An essential element to any real advance is an adequately maintained convalescent institution. Such an institution does much more than provide care for the particular patients who can be admitted to it. It would serve to stimulate medical study of convalescence, now a field much neglected, and would promote throughout the community, interest in the problem of convalescence which will add to the efficiency of all kinds of medical care in hospitals, dispensaries and in the home.

For an authoritative picture of the need for convalescent care in a community such as Cleveland, and a program for a central representative institution for convalescents, the Survey turned to Dr. Frederic Brush, Medical Director of the Burke Foundation at White Plains, New York, the leading institution in the United States for the efficient treatment and scientific study of convalescence. The following memorandum was prepared by Doctor Brush:

CONVALESCENT CARE

FOR AN AMERICAN CITY OF ONE MILLION POPULATION

By FREDERIC BRUSH, M. D.

The Need

There is a convalescent period in illness, with fairly distinct medical and social borders, and now recognized as a particularly favorable time for skilled

id in rehabilitation. The patient's home is the desired, the cheapest, and best place for most convalescence, but institutional convalescence is needed for a certain percentage, in large cities.

Such an institution in its modern conception functions widely beyond mere recuperative rest—in prevention, education, refinement, and Americanization, occupational adjustment, vocational direction, encouragement, and all-round set-up for better living. It complements home care, and notably completes and fortifies social service. It shortens the hospital stay, with large increase of product, and with inspiration to the staff. It saves money directly (convalescent cost being but little over one-half hospital cost per day,) and makes large long term returns to the community in bettered personnel.

Numbers Needing Country Convalescence

Various estimates have been attempted based upon the number of hospital patients in the community, plus a small percentage from dispensaries, private physicians, employers, etc. These may be summarized into an ideal requirement of convalescent beds for ten per cent. of all hospital patients—varying greatly, of course, depending upon each city's conditions. To this should be added about one-fifth for dispensaries and other sources (as at present organized; but this ratio should be increased). Thus a city discharging 100,000 hospital patients yearly should provide institutional care for 2,000 convalescents.

Number of Beds and Apportionment of Patients

Assuming that the city in question presents the better living conditions, we may well take 5,000 hospital patients, plus 1,000 from other sources, as a planning basis. About twenty-one days proves to be the average stay in convalescent homes. The requirement for the 6,000 patients is accordingly 350 beds.

We may base an estimate upon the long and abundant experiences in our greater cities, and apportion them as follows:

1. The Main Institution, for adults—120 beds; men and women—ages, from fifteenth birthday upwards to old age, including 15 per cent. plus of heart disease, with standard surgical (with dressings), preventive and holding (chronic handicapped) convalescence.

2. Children's Home—100 beds, taking girls from 6 to 15 and boys from 6 to 10 years, receiving surgical dressing and orthopedic cases, and heart disease up to 20 per cent. of total, along with the standard lines as above outlined.

3. Boys' Place—30 beds, ages 10 to 15; disease classification as in the Children's Home (Very important but not to be large).

4. Mothers with infants and young children—30 beds, averaging 60 patients.

5. Special Heart Institution—40 beds, for the seriously ill, giving bed care at first, etc. Age and sex as in Number 2.

The Plants

New or expensive buildings are not essential. An old mansion, a large farmhouse with its many outbuildings, or a disused hotel adapt readily. Tents serve well at times; extensions are happily made; much equipment may be improvised. Five acres of land is minimum; the larger areas giving considerable advantages. These Homes might be conducted upon one large plot of 100 acres if the topography, etc., gave essential separation of patient's activities. A location well within 20 miles of the city's center should be chosen, if possible.

Costs

A per day capita cost of \$1.75 may be expected, even under post-war conditions, giving \$225,000.00 yearly operating expense for the 350 beds, as approximate. This includes transportation, and maintenance of a City Admission Office.

Selection of Patients, Follow-up, etc.

Careful selection of patients by one City Officer, given authority and support, is of first importance. This officer may be on part-time only. The necessary follow-up, including occupational and vocational direction, is usually well done by the city organization which sends patients, and the back-to-health-and-to-normal-life cycle is only thus completed.

Convalescent home planning, organization, and procedure are becoming fairly well standardized, with detailed information readily available.

Those of the Staff of the Survey who have been engaged in the local study of convalescent institutions and the convalescent problem can only add to Doctor Brush's statement some suggestions relating his program more in detail to present conditions and probable future development in Cleveland.

In most cities the convalescent problem, so far as it has been dealt with, has been taken up by bits and snatches. Here a group of kindly people have taken a large dwelling house and made it into a "convalescent home" for some twenty-five men; another committee of the charitable maintain a building donated by one of their number, in which sickly and tired mothers may recuperate after illness or operation; still another group has under its wing a small institution for children; and yet another a small "preventorium" for the pre-tuberculous child.

One of the great lessons which the Burke Foundation has taught is the greater efficiency gained through the use of a large institution instead of a number of little ones. The small independently managed convalescent home, accepting ten to fifty patients, secures with difficulty expert medical service of physicians who are particularly interested in the convalescent problem and scientific study of convalescent cases; it cannot possibly provide elaborate therapeutic equipment or a staff of special workers and teachers. In the large institution, therapeutic equipment, personnel and continuous service of a medical staff whose members are selected especially because they are interested in convalescence are all possible within reasonable limits of expense.

In a letter transmitting his outline, Doctor Brush remarks: "It may be well to bring to the attention of those becoming interested in this branch, some of the important points of this proposal: that preventative tuberculosis comes in under numbers 1, 2, and 3; convalescent orthopedics, bone diseases, etc., likewise in these three places; that cardiac children well enough for reconstructive treatment enter under numbers 2 and 3; that adolescents (the group most successfully dealt with and most neglected in convalescence) are especially well planned for. * * *

"Perhaps the most characteristic and radical part of my conclusions is the recommendation, based upon definite experience, for the care of many different classes and ages, etc., in one Institution (see numbers 1 and 2.)"

The recommendation to be made regarding the convalescent problem of Cleveland is that it be dealt with not by bits and snatches, but by one central and representative group of persons who will study the whole problem and, with a long range program in mind, will take each practical step as funds are made available. So far as institutions are concerned, there should be one, rather than many, or rather, as Doctor Brush's outline indicates, a group of related institutions managed as one.

At present Cleveland has:

Rainbow Hospital, with 85 beds, taking children between 2½ and 14 years of age, mostly orthopedic cases.

The Children's Fresh Air Camp, with 60 beds (225 in summer), receiving weak, anaemic children and some convalescent mothers.

Holy Cross House, with a capacity of 50 beds, receiving crippled and invalid children (chronic rather than convalescent cases).

For adults a small number of chronic cases are held at City Hospital, but no convalescent cases are supposed to be there. At Warrensville Infirmary are numbers of chronic and incurable cases, but little provision for convalescents. In a few of the private institutions of the proprietary type convalescent cases are treated, but the number of beds available for such is very small.

Taken as a whole, institutional provision for convalescents in Cleveland is practically confined to children, and even for them is limited to certain types of cases. The main resources throughout the year are Rainbow Hospital, and in summer time, the Children's Fresh Air Camp.

The major need is that some one central and representative group should assume the responsibility of developing convalescent provisions which will be adequate for the needs of the city. It is recommended that the Trustees of Rainbow Hospital either assume this responsibility, or at least act as the agent through which some larger group might ultimately be organized. Rainbow Hospital now provides an excellent service to a limited range of patients, but appears to furnish a basis upon which a much more comprehensive and satisfactory development might be made.

With this in view, it is desirable that Rainbow Hospital should enlarge immediately the scope of its work. It should have no exclusive affiliation with any one hospital with respect to its medical staff or with respect to the reception of patients. It should aim to develop a staff which is especially interested in the scientific medical study of convalescence. It should at once undertake to receive a considerable group of cardiac cases from the children's services of the Cleveland hospitals, as well as convalescent orthopedic and surgical cases. It should institute studies of the convalescent problem in Cleveland, supplementing those made by the Survey, and through its members or representatives the Board should study notable developments in other cities, particularly the Burke Foundation, as a basis for the formulation of a program and of the definite steps which should be taken year by year towards its execution. Publication of these studies and reports of the case work with convalescents of various types are important phases of such a program, and are essential to the growth of appreciation of the convalescent problem by the medical profession and the public. Cooperative affiliation with related agencies, such as some of those above mentioned, would be desirable in the formulation and execution of any such program.

Provision of a convalescent institution for adults, should be made as soon as possible, as a part of this plan, either by Rainbow Hospital or by a group of persons organized in cooperation therewith.

The outline presented by Doctor Brush gives a program which for financial reasons alone cannot be realized in a day, yet nothing less than this should be accepted as worthy of a progressive city.

The cost of maintenance of a convalescent institution is about half that of a hospital receiving the same number of persons with acute diseases. A convalescent home is an institution which no city can afford to omit in providing for its sick. Its absence means burdens upon the hospitals, which involve undue expense, and burdens upon the community which are less easily traced, but which are no less real, being a financial drain upon the charitable public and a definite loss to wage earners and to employing interests.

When serious illness befalls, the care of the patient in home or hospital equires, as it were, an investment on the part of the community in order

the sick man shall be restored to health and living efficiency. From financial as well as from the humanitarian standpoint it is to the community's interest that this restoration shall be complete and shall be as prompt as possible. A period of stay in a hospital for acute diseases represents a part, often the most expensive part of the investment, but the subsequent period of convalescence, either at home or in an institution, requires a main investment of time, skill, and money, also. Unless this subsidiary important investment in convalescence is made, the value of the whole investment may be nil. It is difficult to put such an argument in financial terms of actual cases, but it should not be difficult to appreciate the tragedy of the waste of insufficient convalescence, and to strike the imagination of the citizens of Cleveland who have the means, to support a program and develop an institution which shall be worthy of their city.

CHRONIC ILLNESS AND ITS CARE

Through the courtesy of the Visiting Nurse Association and the Division of Health, a list was secured by the Survey of all patients who were treated in their homes during the month of November, 1919, by the nurses of these organizations, who were regarded as chronic, incurable or convalescent cases. A list of 2,078 persons was furnished. In the absence of an opportunity to make intimate medical study of each case, it was not possible to draw a sharp line between the chronic and the convalescent, but only about ten per cent. were believed to be of the convalescent class. The remaining cases, some 1,800 in number, were chiefly people suffering from chronic disorders, living at home, but needing more or less regular nursing or medical attention.

A tabulation of these cases, classified by age and groups of diseases is given in the following table:

CHRONIC AND CONVALESCENT CASES UNDER NURSING CARE

Diagnoses	Cases		
General.....	142		
Respiratory (except tuberculosis).....	63		
Circulatory.....	37		
Digestive.....	127		
Nervous System.....	174		
Mental.....	17		
Total (not including tuberculosis).....	560		
Tuberculosis.....	1,518		
Grand Total.....	2,078		
		Adults	Children
Total cases (not including tuberculosis).....		382	178
Tuberculosis.....		1,322	196
Grand Total.....		1,704	374

Opinions secured from the visiting nurses and checked by conferences with their supervisors, lead to the conclusion that such medical attention as was needed for these patients in their homes was generally secured by the family or on the initiative of the visiting nurse. The medical attention was either paid for or when necessary was obtained without charge from an interested physician or a district physician. Medical attention in many instances was or should have been secured through a dispensary, since many patients were able occasionally to go out of the house.

Each nurse stated her judgment regarding each patient, as to whether home care was practicable or whether institutional care was necessary. In 7, or 42.66 per cent. of the cases, institutional care was believed desirable. In the remaining 1,191 cases, or 57.33 per cent., it was believed that home care could be adequate. If we omit for a moment the tuberculosis cases, and consider the 560 patients with other diseases, we may estimate that less than half these, or about 250, needed institutional care, and that the remaining number, or about 300, could be cared for in their homes.

In the special report of the Survey on tuberculosis, much attention is given to the shortage of sanatorium facilities, and the need for additional provision in order that at least all active cases of tuberculosis shall receive prompt and adequate institutional care.

This census of the chronic and convalescent cases in their homes is of course only a very imperfect picture. Only a fraction of the total number of cases would be known to any one agency, even to the visiting nurses, yet, taking these figures simply as they stand, it is apparent there were as many as two hundred persons, actually known to a responsible medical organization like the Visiting Nurse Association, who it is believed needed care in an institution for chronic patients, and who could not be properly attended to in their homes.

It would be highly desirable that at least once a year the Visiting Nurse Association should make a similar canvass and classification of its patients in order that the directors, and through them the whole public, shall be informed of these needs.

The problem of chronic illness must be clearly distinguished from that of convalescence. The convalescent patient is in the process of restoration to health. If institutional care is needed, the period of stay in a convalescent home is as a rule comparatively short. Two to four weeks after the usual acute illness or surgical operation is generally sufficient. The medical attention required is of quite a different nature from that needed in a case of chronic illness, where a definite disease process exists or there is a definite disturbance of bodily function which ought to receive close medical supervision and systematic treatment. Another important practical difference arises from the fact that the chronic case is usually a man or woman in middle or late life. To provide convalescent care for children is an important problem, whereas chronic illness among young persons is comparatively rare. Furthermore, cases of chronic disease which cannot be cared for at home are largely among the poor or those of very limited means, and with very unsatisfactory home conditions.

Considering all these points, it may be said that a very large proportion of the cases of chronic illness which require institutional care should be the responsibility of the city, rather than of a private agency. There is, indeed, room for a special hospital to care for the chronic and incurable which would devote particular attention to the interesting but as yet comparatively unstudied medical problems of these cases and which should provide for part-pay and pay patients, though having a certain number of low priced or free beds. The need for such an institution is at present met in Cleveland only by the inconsiderable provision of a few sanatoria or "homes" and hospitals of the proprietary type.

Eloquent testimony to the lack of present provision in Cleveland for the chronic case is derived from many of the leading hospitals of the city in which the Survey found large numbers of patients who had been in the hospitals a long period of time. On the two days, December 3, 1919, and January 15, 1920, on which a census was taken in the institutions of the Cleveland Hospital Council, a tabulation was made of the length of time the patients had been in the hospitals. For this tabulation, Warrensville Tuberculosis Sanatorium, Rainbow Hospital, St. Ann's Maternity Hospital, and Cleveland Maternity Hospital were omitted. The first two of these make special provision for long term cases and cannot be compared with a general hospital, while the latter two accept maternity cases only and for this reason should be omitted.

On December 3rd, there were 2,016 hospital patients in the group considered, and of these 243, or 12.5 per cent. had been in the hospital for over two months. On January 15th the number of cases in these hospitals was 2,029, and the number who had been in the hospital over two months was 286, giving again a proportion of 14.1 per cent.

The wide variation among the individual hospitals is shown in Table VIII, in the Appendix in which the figures for the two census days have been averaged for the sake of simplicity.

It is not necessarily true that a patient who is in a hospital over sixty days is a chronic case, because some patients with obscure diseases or who are slowly recovering from illness or operation, may properly remain in a hospital for several months, but the great bulk of these long-term patients are cases of chronic illness. Some of these patients are private cases and are paying their way, but the great majority do not pay even the cost of their care. Aside from the matter of payment, it is a serious waste of service in a hospital designed for acute diseases to have to care for chronic patients. It must also be remembered that the cost of giving adequate care for chronic patients in a suitable institution is only from one-half to two-thirds of the average cost of maintenance in a hospital for acute diseases.

From the figures secured in the hospitals and presented in the table, it is probable that 250 chronic cases are usually in Cleveland hospitals, in beds which are designed for acute cases and for which there is great demand.

The individual hospital is only in part to blame for these conditions. It is important to see just where the responsibility lies and what steps can be taken toward remedy. A few long term cases are retained in acute hospitals because they pay for the privilege, but these are not the majority. No hospital however should permit such patients to stay if there is demand, as there frequently is, for beds for acute cases. There is a much larger proportion of the long term cases who could be sent to their homes and suitably cared for therein if sufficient trouble were taken to make the necessary arrangements for medical supervision and for attention at home. Adequate home care for such chronic cases would require the hospital to have a social service department. An active social service department in a hospital would study the home problems of the long term patients, finding just what would be necessary in the way of home provision, securing financial aid where this would be required and where the cost would be within reason, and enlisting the cooperation of the Visiting Nurse Association, the district physician, and other agencies.

When it is recognized that the cost of maintaining a chronic case in the ward of an acute hospital for a year is almost equivalent at present to the salary of a social worker during the year, and that a social worker would be able to work out the problems of a large number of such chronic patients if they could be cared for at home, it is seen that the present hospital policy is "penny wise and pound foolish." From the standpoint of individual hospitals, this statement may be controverted, since the hospital would have to maintain the bed anyway, and add the salary of the social worker in addition. But from the standpoint of the community and of the Welfare Federation as representing the community, it would be an actual saving to introduce a social worker and let the bed occupied by one or two chronic cases in the course of a year be occupied by twenty or more acute cases.

There are also a very large number of chronic patients who do not require the amount of care given in a hospital and who are not ill enough to be in bed all the time. These patients are suitable for treatment in a doctor's office, or, in the case of many, dispensary care is all that is necessary. The importance of dispensary care in chronic illness requires emphasis for the reason that a great many chronic patients are suffering from disorders which need very careful medical study to arrive at an accurate diagnosis, and therefore successful treatment; and such medical study often involves the services of one or more specialists, laboratory tests, the use of the X-Ray, etc. The expense of such diagnosis is beyond the resources of many people who cannot afford to pay a doctor and who usually have a family physician. The development of dispensary service in Cleveland is an important means of providing consultant and diagnostic aid. These patients, generally through their family

physician, could thus secure the special study and diagnosis necessary. An enormous amount of physical distress and suffering and of habitual living at fifty per cent. efficiency, exists because of the failure to study out conditions of a chronic nature, to arrive at a definite medical analysis of the character of the disorder and to outline a plan of treatment, hygiene and living conditions which will restore the patient to health or will maintain him at the highest physical grade possible for him. This class of ambulatory chronic patients represents a very large number, of which no census anywhere has yet been made.

After putting aside (1) the ambulatory chronic cases, (2) patients who are entirely able to pay for whatever care they need in an institution or elsewhere, (3) the patients who could be cared for in their homes with social service supervision, and (4) the tuberculosis cases whose needs are studied elsewhere, there remain those who definitely must receive care in a special institution for the chronic or the incurable, and who can pay little or nothing for what they receive.

To meet this need is the responsibility of the municipality. Warrensville Infirmary is the obvious institution which should play this part in behalf of the city.

The Infirmary occupies a well-constructed building, built in 1906, and placed in an excellent location. It operates a car to meet the Chagrin Falls street car line. About one hour is required to reach Warrenville from the Cleveland Public Square. Unfortunately, however, no other provision than street cars is made for transporting patients; there is no ambulance service. If a case of contagious disease develops at Warrenville, the patient must be taken to City Hospital in a truck.

The capacity of the Infirmary is approximately 900 beds. In March, 1920, there were 634 inmates. Of these 147 were insane. A further report stated that there were 46 cripples, 41 paralyzed, and 25 blind, who had been in the institution two or more years. Hardly more than half of the inmates in 1918 were American-born. There are no interpreters.

The personnel in charge of the institution consists of a Superintendent, non-resident, appointed by the Director of Public Welfare; a Medical Director (also in charge of the Workhouse and the Girls' Home), appointed by the Director of Public Welfare and responsible to the Superintendent; a Matron, appointed by the Mayor; and, at the time of the study, twenty-two attendants, not all trained—inmates being used where possible. The General Superintendent of the City Farms has some administrative control over the Infirmary.

From this account it is obvious that the Infirmary has not recently used its capacity, and that there has not been sufficient service to provide satisfactory care for even those who are there. On one day on which the institution was visited, there was but one attendant for three women's wards on three different floors, in which there were 120 patients, 40 of whom were semi-invalid. One nurse is assigned to make dressings, fifteen or twenty being the daily average. The Medical Director is so crowded with work, as he also has charge of the medical service at the Workhouse and the Girls' Home, that he can attend to only the most urgent needs. He is unable to follow up complaints or to answer letters which come to him complaining of the care of patients.

It was stated by the Outdoor Relief Department that a physical examination was part of the admission routine, the applicants being sent to district doctors or hospital dispensaries. There is no provision for a record of examination on the card, unless the diagnosis and condition should be mentioned in the investigator's report on the reverse of the card. No medical examination is made on entry to the institution, either for venereal diseases or for any other complaint; neither is a physical examination made afterwards.

It is decidedly unfortunate that in spite of the urgent need for more facilities for the care of chronic cases in Cleveland, only those patients who are physically able to care for themselves are considered suitable for Warrensville Infirmary. Bed-ridden cases and those which require more or less medical and nursing care appear to be regarded as undesirable.

With the present shortage of help and attendants this point of view on the part of the officials can readily be understood, but such a condition is not permanently tolerable. Here is a well located plant with 900 beds. In Cleveland are large numbers of chronic patients who are cared for in acute hospitals at undue expense, and with serious deprivation of service to the acutely sick. The city of Cleveland should meet its elementary responsibility in providing enough money to pay for medical, nursing and household service required to run Warrensville Infirmary to its capacity, so far as there is really demand for it.

In extenuation of the present policy it is fair to state that conditions during and since the war have made it difficult to secure sufficient personnel, yet the officials in charge do not appear to have made any such determined effort as the situation requires, to impress upon the city administration and also upon the public at large, the need of providing more funds for Warrensville, so that it could care for its inmates properly and so that it could be open to all the classes of patients who urgently require such care as this institution ought to render.

The institution provides practically no therapeutic facilities, such as massage, mechanical exercisers, electro-therapy or hydro-therapy. On the advice of a committee of the Cleveland Welfare Federation studying the

welfare of cripples, a trained occupational worker was employed, and in October, 1918, a workshop was opened for the men. Work for the women consists mainly of sewing and knitting. The provision of therapeutic facilities would be a great comfort to a large number of patients. Further development of the occupational work is highly desirable.

It is apparent that particularly under present conditions, the problem of securing sufficient nursing and attendant service is a difficult one, as is the related problem of household help. The distance of Warrensville from the city renders it less desirable from the standpoint of many employes than a more accessible institution. Higher wages will be generally necessary as a result, but even higher wages will not themselves usually prove a sufficient inducement, particularly when employment can be secured readily by people who are even moderately trained at any definite occupation. The living conditions must be made not only comfortable but pleasurable. The development of recreational facilities for those residing at Warrensville is a practical step which would be of much service and which would justify the necessary expenditure by the city. It would render possible the retention of a larger and certainly of a more stable staff, and would save more money than it would cost.

From the standpoint of the patients, entertainment and recreation are a very obvious measure of humanity, while from the standpoint of the attendants and the help, they are a practical measure of economical and efficient administration. The management of the Infirmary could doubtless secure considerable assistance from various Cleveland agencies interested in recreation.

A certain amount of music and other entertainment can be secured on special occasions with little or no expense. There is need for some person who will be definitely in charge of the recreation and social life of the institution, both for the patients and for the staff of nurses, attendants and help. Such a person would develop many resources within the personnel itself, and would organize social and recreational activities. With a little cooperation from the administration and some expenditure for equipment, music, etc., a great deal could be done.

Steps should be taken in making up the next annual budget for utilizing the Infirmary to a larger percentage of its capacity, in order to provide for the large number of persons in Cleveland who now need institutional care as chronic patients. There are at least two hundred such patients now occupying beds in acute hospitals in Cleveland, to the detriment of these hospitals' service, while really acute cases must moreover be turned away for lack of beds. If Warrensville can be provided with sufficient staff to make care satisfactory for the inmates, it would undoubtedly be possible to keep it full up to nearly if not quite all its capacity of nine hundred beds.

To sum up the situation in Cleveland regarding chronic illness and its care, it may be stated that:

1. There are at present at all times several hundred patients in the hospitals of Cleveland, designed for acute cases, who are chronic cases and should not be in these hospitals at all.

2. As a result, hospital service is rendered less available, and the acutely sick must often be denied needed care because beds are taken.

3. There are very large numbers of ambulatory chronic cases who require study by specialists, the aid of laboratories and of other diagnostic apparatus in order that they may receive sufficient medical study to be properly treated. The shortage of dispensary and consultant service for the physicians of Cleveland at present renders it impracticable for any of these patients to secure what they need.

4. The lack of a sufficient number of privately supported institutions furnishing a high grade of care for chronic cases who can pay, forces the acute hospitals to retain a number of such patients and leaves the remainder to be inadequately cared for at home or in the few small proprietary institutions who seek such work. There is undoubtedly place for a well-managed institution for chronics, which could be largely or wholly self-supporting.

5. Adequate social service departments would enable a considerable number of chronic cases now in acute hospitals to be cared for properly in their homes. A definite economy to the community would result. This is an additional reason for the increase of hospital social service in Cleveland, the need for which is more fully discussed in the next chapter.

6. Provision for those chronically ill who cannot be cared for at home and who cannot pay their way in an institution, is a primary responsibility of the municipality. Warrensville Infirmary has the space and needs the additional personnel with which to meet this responsibility. There should be unremitting effort by the Department of Public Welfare until funds are provided for this purpose. Such chronic cases should not be retained in any considerable numbers at City Hospital, whereas as many as 300 beds could well be used at Warrensville, not including in this number those who are crippled or merely infirm from age.

7. The large number of tuberculosis patients found in their homes by the Survey emphasizes the need, brought out in the special report on tuberculosis, for increase in sanatorium provision.

SOCIAL SERVICE IN HOSPITALS AND DISPENSARIES

It is only fourteen years since the first hospital social service department in the United States was established in Boston. Today over three hundred hospitals have taken on this new and important adjunct to their medical service. It is curious that a community so advanced as is Cleveland in many respects should have made only a slight development in the social service activities of its hospitals and dispensaries.

Three hospitals in Cleveland have organized social service departments. Four other institutions have each one person who is devoting some attention to social and financial relationships connected with patients. The Lakeside Hospital Social Service Department has been in existence seven years, that at Mt. Sinai three years, and that at St. Vincent's Charity Hospital one year. Each of these social service departments began with one worker. Lakeside had six workers at the beginning of 1920; Mt. Sinai four and Charity five. These departments have developed independently and there has been no uniformity in policy.

At Lakeside, the social service department appears to be an outgrowth of the visiting nursing service. For a number of years its activities have been almost entirely confined to the dispensary, and its head worker was practically responsible for admission of patients and for many details of dispensary administration. It is unfortunate that for a number of years this department has maintained a policy of medical secrecy which has prevented its meeting the needs of agencies such as the Associated Charities or making a contribution to the community health problem. To furnish to a charitable agency information regarding the medical condition and the health needs of patients in whom the agency is interested is part of the responsibility of a hospital or dispensary. To effectuate this relationship between the hospital and the outside non-medical charity is part of the duty of the social service department. Lack of records in the social service department at Lakeside has rendered it impossible to study the social conditions which cause disease or which render its successful treatment impracticable unless they are altered. Although Lakeside Dispensary is a teaching clinic of Western Reserve University Medical School, the social work is not so connected with the organization as to bring the medical students in contact with it and enable them to learn something of the relationship between the medical and social problems. This has been done in a number of other leading medical schools, notably in that of Indiana University.

At Mt. Sinai Hospital, the social service department was organized as a definite part of the dispensary, and has been much more intimately related to the medical service on the one side, and to the social and charitable agencies on the other. As at Lakeside, a considerable part of the time of the social service staff has been spent in assisting in the administration of the dispensary. As at Lakeside, a lack of clerical assistance has made adequate records impracticable, so that much of the research value of the work has been lost.

he recently developed department at St. Vincent's Hospital is like the others, largely concerned with the dispensary rather than with the hospital. Lack of clearly defined policy other than to do kindly and friendly things for patients is apparent here as often elsewhere in this new branch of service.

In the prenatal clinic at St. Luke's Hospital a nurse spends half her time attending dispensary patients and in making financial investigations for the hospital, and this is called social service.

At the Babies' Dispensary a graduate nurse, called a "social service nurse," is responsible for the admitting of new patients, and classifies them according to their ability to pay the various grades of fees in this institution—admitting them or referring them elsewhere according to her judgment.

At City Hospital there has been a single worker, who without any definite policy or guidance, has endeavored to mitigate personal or other problems among those few patients she could reach among the thousands passing through the institution yearly.

At Rainbow Hospital is a "social service nurse," who does follow-up work for the children who are discharged.

In addition to the activities of these seven institutions, the Association for the Crippled and Disabled maintains a social service department of a distinctive and efficient sort. While not properly speaking a hospital social service department, its work is of very similar character. A description and location of this will be found in the portion of Part II. which deals with the care of cripples.

The most striking fact about hospital and dispensary social service in Ireland is the lack of any definite conception of the policy which a social service department should pursue and of its relationship to the organization of the institution in which it works. In no department does there appear to be a clear recognition that the prime basis of social service in a hospital dispensary is the assistance of medical treatment. Social service is not there should not be in a medical institution for the sake of being kind to patients, or for the sake of finding out what patients can pay the hospital or for the sake of helping to run the dispensary.

Kindness is a general function of a hospital organization—not an attribute of social service in particular. The fixing of fees or finding out whether patients can pay is an administrative function, to be performed by a financial investigator. It is a serious interference to any really constructive social service to patients if the worker who is supposed to render such service is put in the position of an inquisitor into the details of personal income.

Helping to admit patients to a hospital or dispensary or to administer a dispensary is a useful and necessary service which social workers have often been called upon to do since no other trained persons have been available, particularly in a dispensary. Social workers have been rendering such administrative assistance in several dispensaries of Cleveland as in other cities, and have been of substantial value to their institution and to the patients by doing so. It is quite true that assistance in many phases of administrative work in hospitals and dispensaries falls naturally to social service. When these pieces of administration involve personal dealings with patients (as in admissions or in the management of clinics) the training and practical experience of the social worker is of distinct value.

Physicians in a hospital do various things which a layman might do, such as making records or assisting in administration; so also nurses do many things for which their special training as nurses is not a pre-requisite, but the essential reason which brings a doctor to a hospital is the activity which he alone is trained to perform—medical diagnosis and treatment. The reason why nurses are in hospitals is because there are certain duties which only trained nurses can perform—the bodily care of patients and assistance of physicians during operations and in therapy. The distinctive function of social service which brings the social worker in the hospital and dispensary is the contribution which she can make to medical treatment, assisting the physician in securing those facts about the patient's personality and environment which will bear upon the cause and characteristics of his disease, and aiding the physician in planning and carrying out the details of treatment which under the conditions of the patient's character, family, and finances, are necessary to secure the best results.

In the hospitals and dispensaries of Cleveland, social service has been largely introduced as a measure of kindness and as a helpful agent in administration. There has nowhere been recognition of any definite policy or of the essential relationships between hospital social service and medical treatment.

A trained social worker is one who has learned to make critical but sympathetic judgments of the human problems usually presented, and who has also learned how these can be dealt with effectively in practice. As an example of the questions which face medical and social workers and which need trained social judgment for their answer, we may cite:

Shall material relief be obtained for a family for the three or four months during which the father will be in an institution because of sickness, or shall the five children and mother be placed in four different homes of willing relatives during that period—a course to which the mother strenuously objects?

Shall a delicate child with kind-hearted but quarrelsome and uneducated parents, be placed in a country home for six months; or shall an attempt be made, through the parents' love for the child, to reconstitute family life sufficiently to enable the girl to get well at home?

Shall an unmarried pregnant girl of 21 be urged to marry the father of her child if the man is willing, although the girl has lost her confidence in him, or shall she be helped to fight her battle of life alone?*

The answer to such questions requires in the first instance, careful study of the social worker of the patient's personality and family circumstances, reporting to the physician and deciding in conjunction with him the proper course to pursue, having both medical and social facts in mind.

There is very little indication from the studies made of the work of the social service departments in Cleveland that this type of analysis is practiced in its definite relations to the medical problem of each case. The character of the disease is of vital influence in determining what treatment is necessary, but how the treatment shall be applied depends in a large measure upon the patient's personality and environment.

In addition to the study and analysis of the case necessary to form judgment as to the social causes of the disease and of the conditions which will affect its treatment, the social worker in the hospital or dispensary must also endeavor to help in the accomplishment of the treatment, as by finding a job for a man with a damaged heart, getting food or money for an undernourished family with three sickly children, or by securing a vacation, a friendly visitor, or the help of a relative so that a woman will consent to have an operation in the hospital, knowing that her children are properly cared for meanwhile. In these types of practical service, where the problem is so obvious, persistence and resourcefulness are often shown among the cases handled in the Cleveland social service departments, but because of the combination of lack of definite policy and of pressure of administrative work, there has been little real study of cases so as to bring out relationships between disease and social conditions, thus enabling a really definite and well considered plan to be made for combined medical and social treatment.

It must be apparent that in many cases where the personality of patients or family difficulties or lack of funds are involved, medical treatment is largely or wholly wasted unless adequate social service goes with it. The primary and fundamental recommendation therefore for the social service departments of Cleveland is a definite aim—a clear-cut policy.

The need for sufficient medical social service in the Cleveland City Hospital is the outstanding requirement when individual institutions are considered. In a large municipal institution of this sort the great majority of patients come from home conditions which render convalescence difficult (as has been shown in the section on "The Convalescent and the Hospital") and the hospital's care is of greatly diminished value in restoring the individual to health unless something more is done than simply to provide surgical operation or bed care during an acute illness.

* Davis & Warner, "Dispensaries." 1918. Page 114.

Waste of human energy, increase of human suffering, and fruitless expenditure of public funds goes on at any large municipal hospital without social service—the institution can merely render medical attention during the acute stage of an individual's illness, and passes by related conditions in the man or in his home or his occupation.

Re-occurrence of illness, re-admission to the hospital, lowered efficiency of the patient and family, further illness, and family deterioration, make a vicious circle which the most skilled surgeon and finest diagnostic equipment cannot break alone.

In New York, Bellevue Hospital, with 1,300 beds, has a social service department with 30 workers. In Boston, the City Hospital, an institution only a little larger than the City Hospital of Cleveland, and much smaller than the enlarged City Hospital which Cleveland will soon possess, has 17 social workers. At the Cook County Hospital, Chicago, there is a social service department with 8 workers, and in the social service department of Cincinnati General Hospital, there are 4 workers.

The larger the institution, moreover, the greater is the need that the head worker be a person of unusual personality and previous definite experience in hospital social service. The Cleveland City Hospital needs an adequate social service department with a strong, well-trained woman at its head. She should be responsible to the superintendent of the hospital, but there should be a social service advisory committee appointed by the Director of Public Welfare (or by the board of trustees if such a board is formed for the City Hospital). The duties of such social service committees are touched upon later in this chapter. This committee would be of particular importance to City Hospital during the first years of development of adequate social service there.

It may be mentioned that some years ago a social service department was started in the Boston City Hospital on the initiative of a number of private citizens, including some of those closely associated with the institution by medical interests. Private funds supported the original staff, but the city soon entered and paid a share as the department enlarged. While at present some of the staff of workers are still supported by private funds, the outcome will undoubtedly be complete municipal support. At no time, however, has there been any question of division of responsibility for immediate control by the hospital. In a municipality with the active civic spirit of Cleveland such initial sharing of the burden of hospital social service by private funds ought not to be necessary; but it is not at all undesirable.

The Welfare Federation has certain special reasons for supporting social service in hospitals and dispensaries. A very large proportion of poverty is caused by sickness or is accompanied by sickness, making it useless to attempt to restore the family to self-support until the illness has been successfully treated. Studies in a number of cities indicate that sickness is one of the conditions accompanying poverty in from 60 to 80 per cent. of the families known to such an agency as an Associated Charities. Since the members of such families obviously cannot afford a private doctor, it may be said that

the hospital and dispensary must be their family physician. The charitable agency must look to the hospital and dispensary for medical diagnosis, advice and treatment, and the agency requires the constant cooperation of the hospital and dispensary. Without the social service department this cooperation generally proceeds with halting steps. The social service department is the link between the highly organized, specialized medical institution and the community agency which deals with the family in its home. Without such a link, much money and much time are wasted by these agencies. Thus it is not only in behalf of the intrinsic service to the patients of hospitals and dispensaries that social service has a claim to support, but also because the work of other charitable agencies which are members of the Welfare Federation will be very substantially assisted thereby.

The special need of hospital social service in connection with the convalescent and the chronic case has been brought out in the preceding chapters.

The section dealing with the plan of hospital organization includes a brief statement concerning social service. A social service department should be part of the hospital organization, not maintained by any outside agency. Social service needs to work intimately within the hospital and hence to be an integral part of its administration. The head worker of the social service department should, like the heads of other departments, be responsible to the superintendent, but it is advisable, particularly during the formative stages of social service, to have a social service committee, including a few members of the board of trustees, one or more members of the medical staff, the superintendent ex-officio and other persons who are familiar with general philanthropic work and whose advice regarding the policy and problems of the department will be of value. Such a committee should be advisory, like others suggested in the scheme of organization.

The personality of the head worker and the quality of her training and experience are of vital importance to a social service department. There has been in Cleveland, as in a few other cities, much discussion as to the training necessary for a hospital social worker, and in particular of her relation to nursing. A nurse's training does not provide one of the essential elements for a hospital social worker, nor can this be gained by a brief period of observation of social service or by a two or three months' "course." Not less than one year's study of social work and an additional year of practical experience under educational supervision is necessary to render any person a competent worker in so difficult and complex a field as this. The training of a nurse provides important knowledge of medical matters and a familiarity with the point of view of physicians and patients, and with the conduct and administration of hospitals and dispensaries. Actual experience in many social service departments throughout the country has proved that, as a matter of fact, some successful workers are nurses and that some of them are not nurses, and that to debate as to whether a hospital social service worker must be a nurse or must not be a nurse is merely a waste of time. Personality implying effectiveness in dealing with people, a certain degree of administrative and executive ability, and a definite training in the analysis of social problems and familiarity with the methods of dealing with them,

are essential elements, as well as certain subject-matter concerning particular diseases or medical problems to be dealt with. During the present formative period of social service, too much care cannot be taken in selecting the right quality of head worker, and then leaving it largely to her to nominate and appoint her assistants.

Social service in the hospital and dispensary must be viewed primarily as an adjunct of medical treatment. It is usually desirable that social service shall assist in various administrative activities, as in connection with the admission of hospital patients, the admissions to the dispensary or the management of dispensary clinics.

It is not desirable, however, that a member of the social service department should be used as the financial investigator of the hospital. The utilization of social workers at the admission desk of a dispensary is desirable, but the financial grading of patients should not be her primary responsibility, nor should financial grading be of such rigidity as exists at the Babies' Dispensary, or existed until recently, at Mount Sinai. Such rigid grading tends to develop arbitrary standards of dealing with patients, on an entirely superficial basis, establishing a wrong relationship with a patient by emphasizing his financial rather than his physical need. It is well that Mount Sinai has discarded the custom.

It may be added that it is not desirable to have any person kept continuously at the desk admitting patients to hospital or dispensary without being assigned a portion of her time to other phases of social service, particularly the study of families in their homes. The admission of patients requires a series of "snap judgments," based necessarily on slight information. In order to keep any person from becoming "routinized," losing freshness and flexibility, the effect of making necessarily hasty judgments in the admission of patients must be counteracted by giving the worker some, even if only a small amount, of time for intensive observation and service with a few patients in their homes.

In a dispensary the social worker can be of value not only at the admission desk, but in various phases of dispensary administration, notably in the detailed executive management of clinics. The routine of the clinic needs adaptation to the needs of each patient. The doctors' time should not be taken up with executive detail but should be given to medical work. The social worker, as clinic executive, is a great aid alike to physician and patient.

The Social Service Clearing House supported by the Associated Charities provides (a) registration of families known to charitable agencies. By means of this there is at the office of the Clearing House a list of families or "cases" known to any agency using the Clearing House, and with the name of each case or family is a list of the agencies which have been interested in this case. The Clearing House also provides for (b) answering inquiries from agencies about families and telling them whether any other charitable agencies are interested in the family, and if so, what agencies. By this means a charit-

ble agency may find out the names of those who have previously known family and then, by calling these agencies, learn what has been or is being done for the family.

The Clearing House is very largely used by hospitals and dispensaries of Cleveland. During 1919 a total of 39,569 inquiries were made, and of this total of 25,966 or 43 per cent. were from medical agencies, chiefly dispensaries. Such registration takes place largely through the social service departments of the dispensaries and through the nurses in the health centers.

Registration of dispensary cases in the Social Service Clearing House, however, is not accompanied by full use of the information thus secured. When the dispensary registers a case it learns automatically by the reply slip, sent from the Clearing House, the names of the agencies who have formerly known the family. If the social service department of the dispensary does nothing further the time spent in registering the family is practically wasted. It is found that in a large number of cases no use of the information secured from the Clearing House is made.

The Social Service Clearing House is a most important means of promoting team work among agencies and of avoiding overlapping in dealing with families. Its use should be increased in every way, but it is a question how far mere registration without making use of the information is worth while.

It is recommended that a conference be held of representatives of the Associated Charities maintaining the Clearing House and of a number of representatives from medical agencies, particularly the large dispensaries and health centers, and that the following questions of policy be discussed and, if possible, decided.

1. Shall it be the policy of the agency to register all cases, or only cases in which it is likely that they will make use of the information secured from the Clearing House?

2. If the latter, decision should be reached by each agency as to what types of cases, classified in medical or in other ways, they will register, and the Clearing House should be informed of this policy and of changes from time to time.

It is desirable that as large a number of cases be registered as possible, but mere waste of effort in futile registration should be avoided. It is necessary to draw the line at the right point, given a certain sized social service and clerical staff in each medical organization.

It is not deemed advisable that a routine social history be taken of every patient, as is done in some clinics, notably at Mount Sinai. Many facts of value are found through conference between social worker and patient, but unless there are enough social workers to take up these cases and deal with the needs found, the time taken in getting a thorough social history is largely

or wholly wasted in many instances. Unless a dispensary has a very unusual number of social workers, such as no dispensary in Cleveland has at the present time or is likely to have in the near future, it is advisable that detailed social histories be taken only on selected cases, the social worker at the admission desk or in the clinic determining (on necessarily brief judgment) which cases shall be selected.

Social service departments have generally suffered from lack of sufficient clerical assistance to keep adequate records which are required in social service as in medicine, for good work. Furthermore, it is not economical to take a large part of the time of a social worker for clerical tasks.

Finally, it is urged that a definite portion of the time of the head social worker or of one of her best assistants be devoted to the constant study of the social problems of the hospital and dispensary, and their interpretation to the staff and the administrative authorities of the institution. Periodical studies of the social problems of selected groups of patients are practicable even in a small social service department, if the groups selected are small, but judiciously chosen so as to be medically and otherwise significant. Such studies and reports on the social problems of these patients outline to the staff and the administration the social conditions influencing some of the chief diseases treated in the hospital and dispensary. Only in that way can the policy of the social service department be expected to grow, and the hospital and dispensary steadily advance in a broad policy of prevention as well as cure, and of widening service to the community.

AMBULANCE SERVICE

To understand what the ambulance system of Cleveland ought to be it is necessary first to outline the present situation.

There are three different agencies in Cleveland which may be called upon for ambulance service. The Police Department has "Police Emergency" cars, used for the sick or for the law-breaker, as the need may be. City Hospital owns three ambulances (two Atlas cars and one Ford) but has only one in commission.* The Survey was informed that each of the local undertakers, of which there are over 100, has one or more "combination-wagons" (combination "dead-wagon" and invalid carriage).

From January to November, 1919, the police answered a total of 3,290 ambulance calls. The City Hospital ambulance was out of repair for five months of 1919, but during the other seven months made 937 calls. The number of calls answered by the undertakers could not be estimated.

In contrast with these provisions may be cited the provisions found in several other leading cities. In New York City the ten public hospitals operate 31 ambulances, and in addition, 35 private hospitals provide a total of 70 ambulances. The City Hospital in Providence, Rhode Island, has three ambulances. In Jersey City the City Hospital has six ambulances. In Philadelphia about 35 private hospitals own ambulances and their services for emergency work are recognized by an annual appropriation of \$300 to each hospital from the city.

The distribution of ambulances has an important bearing upon their availability and promptness in answering calls. A police ambulance is stationed at each of the fifteen police precinct stations of Cleveland except at Precincts 4, 10 and 15. The City Hospital ambulance is expected to serve the entire city, and the service of the ambulances provided by the undertakers is not districted. Calls for the Police Emergency are supposed always to be sent to the Police Information Bureau, and then to be relayed to the nearest precinct station, although they may be received directly at the precinct station itself. If the emergency patrol at the nearest precinct station is not available, the call is transferred to another district office. So far as could be ascertained, there is nothing to prevent a person from calling the police emergency, City Hospital ambulance and an undertaker's car, for the same emergency case.

In a matter where a few minutes time may be of such vital significance, the promptness with which ambulance calls are answered is of decided importance. The consensus of local opinion seemed to be that the police emergency cars were prompt in arriving, but there was universal criticism of the utter unreliability of the City Hospital ambulance in answering calls. Delays of many hours often occur and it has not been at all unusual for the ambulance not to arrive until the next day after the call was sent in. One of

* Note—It is understood that a new ambulance has recently been purchased for City Hospital.

the hospitals reported a case of pneumonia, for which the City Hospital was asked to send an ambulance on the 18th of the month. The ambulance was promised for the 20th but never came at all. In the case of contagious diseases, which can only be received at City Hospital, and for which the City Hospital ambulance is the only logical and suitable means of transportation available, such a delay means unnecessary exposure of other persons, especially dangerous in the crowded homes and lodging houses from which the City Hospital patients are apt to come. It is our opinion that at least two more ambulances should be provided for transporting contagious cases, so that all these cases may be cared for by the City Hospital's own ambulances. It is also felt that twenty-four hour service should be provided by the City Hospital for contagious cases. With the transportation of contagious patients concentrated under the control of City Hospital, the hazard of poorly disinfected ambulances, such as at present exists, could be obviated.

Inasmuch as a patient for whom an ambulance is called is often seriously ill or injured, ambulance service must mean more than mere transportation from one place to another. An injured man may have to be carried from his house to the ambulance. A person hurt in a street accident may need some form of first aid in order to save his life. A case of acute illness needs to be made comfortable for the ride to the hospital, and in winter needs to be sheltered adequately from the cold. In case of contagious disease, the ambulance must be disinfected in order to protect the next patient using it.

These requisites of efficient ambulance service are met, when met at all in Cleveland, in varying degrees.

The Police Emergency cars carry the driver and one other policeman. The City Hospital ambulance sends someone with the driver, if the patient must be carried. One undertaking firm which cares for many of this class of cases sends only the driver of the car.

Training of the ambulance crews of the police force in first aid and the proper care of patients on their way to the hospital, has not been so complete and adequate as is desirable. A lecture on first aid is given by a physician at each district, and instruction is given in the use of the pulmotor. A few years ago lectures and demonstrations were given by a representative of the Life Saving Corps of the Red Cross. Comment has come to the Survey of the kindness of the police who serve with the ambulances, but more than kindness is needed to give first aid treatment in case of sun-stroke or suffocation. Skill and definite training are necessary. The policemen assigned to ambulance service should be required to pass a thorough course in first aid, consisting of both theory and practice. The provision of an adequate emergency kit for each ambulance would seem imperative, yet the police patrols are provided with only tourniquets, rubber gloves and handcuffs, and the City Hospital ambulance had no first aid equipment at all. This absence of first aid equipment is not excusable, and should be remedied without delay.

At present there is no continuous assignment of members of the police to the ambulance service, so that a man with proficiency gained by experience (in lieu of training) may be replaced by one to whom the simplest matters of emergency treatment are unknown.

No matter what the ailment of the patient may be, the ride to the hospital needs to be made as comfortable as possible. The following incident, similar to many which have come to the attention of the Survey, was reported on the personal observation of a member of the Survey staff, on one day during the winter. The Police Emergency was drawn up in front of a store on lower Euclid Avenue, and a shivering, pallid woman in a semi-conscious state was carried out and placed on the hard, unpillowed leather shelf of the ambulance. There was no blanket to protect the woman from the cold northeast wind, and her husband covered her with his coat.

The type of ambulance used by the police department is uncovered at the rear end and the cars are very unsuitable for cases of serious illness, especially patients with respiratory disease. The City Hospital ambulance, however, is a closed car with a stretcher.

The Animal Protective League operates two ambulance trucks for the transportation of dogs, and was at the time of the study having another one made. Their ambulances are fitted with adjustable cages. The interiors of the cars are painted, and the cars are washed out with hot water to keep them in a clean and sanitary condition. In winter the exterior sides are covered with regulation side curtains. The humane care of dogs is a matter which should be of concern to every person, but it is certainly only reasonable to insist that at least the same degree of humane care be rendered to human patients who through illness or accident are forced to ride in an ambulance.

The matter of disinfecting an ambulance which has carried a patient suffering from contagious disease, is one of importance. Some provision is made for disinfecting the police emergency cars by formaldehyde spray, but conference with the policemen in charge of these cars convinced the investigator that very little real disinfection was done. Disinfection of the City Hospital ambulance by wiping out with cloths moistened in creolin solution, and change of pillow case and blankets, is carried out on return from transporting a case of contagious disease only when the case next to be called for is one of a different contagious disease. From numerous complaints by physicians it would seem that undertakers often fail to make any provision for disinfection, although no data on this matter were obtained.

One thing which has impressed itself most forcibly upon the Survey staff is the general unwillingness of the dependent sick to use the Police Emergency ambulance. Well-to-do patients can, of course, afford to pay the fee charged for the use of undertakers' cars. Innumerable cases were found, however, where patients who could ill afford the five or ten dollars, summoned a private ambulance rather than endure the stigma of riding in the police emergency. It must be remembered that to all practical appearances there

is no distinction between the sick man in the police emergency and the man who has been engaged in a street fight or some less commendable pursuit. Natural pride and self-respect resent such a method of transportation in case of sickness or injury, and this feeling of resentment is justifiable. Certainly a more dignified and considerate method of conveying a patient to the hospital needs to be provided. On the other hand, it seems just as unfortunate that an undertaker's wagon should be used for carrying patients.

No ambulance service is provided for taking patients to Warrensville Infirmary or, in case a contagious disease develops there, for removing the patient to City Hospital. In the latter case a delivery truck is used, an arrangement hardly to the credit of the city of Cleveland.

It is believed by the Survey that at least the Cleveland hospitals maintaining over 200 beds should provide their own ambulances, and that the smaller hospitals might combine in some manner under the Hospital Council. In order to maintain such a system of ambulance service in a satisfactory manner, it is necessary to have some central organization. In Cleveland, so long as the present police emergency ambulances will doubtless remain in use for some time, even though individual hospital ambulances are provided, it would doubtless be best to retain the present central call bureau under the jurisdiction of the police department, assigning an emergency district to each hospital providing such service. The method of handling ambulance calls used in New York City may be taken as the basis of a system for Cleveland. In New York the city is districted for emergency ambulance service and there is a central bureau to which all emergency calls are made. This central bureau is at all times informed of the movements of each ambulance, whether it has gone for a patient, or whether it is available for use on a call. When an emergency call is received it is relayed to the proper district office. With a little modification the present central call bureau of the Cleveland Police Department could be adapted for the use of an efficient city-wide ambulance system.

The following recommendations are considered essential to the improvement of the ambulance service of Cleveland:

RECOMMENDATIONS

The police patrol wagons should be replaced by ambulances for use in emergency work, and the use of police patrol wagons for ambulance transportation should be discontinued as rapidly as possible.

Each ambulance should be provided with a stretcher, blankets and ordinary first aid equipment, including a Thomas splint.

At least four such cars should be provided and stationed in appropriate sections of the city.

The policemen assigned to ambulance service should be required to pass a thorough course in first aid, consisting of both theory and practice. This instruction should be

nder the direction of the Division of Health. Assignment to the ambulance branch of the police service should be continuous.

At least two more ambulances should be provided at the City Hospital to be used for transportation of contagious cases from all parts of the city to the City Hospital, and for transferring cases to and from Warrensville Infirmary and Sanatorium.

Twenty-four hour service should be provided by the City Hospital for the transportation of contagious cases.

Hospitals of over 200 beds should provide their own ambulance service, smaller hospitals combining with one another under the Hospital Council to provide such service. The larger hospitals also might find it advantageous to come into some such joint scheme.

As ambulance service is provided by individual hospitals, an agreement should be reached with the Chief of Police by which an emergency district would be assigned to each hospital providing such service.

The existing centralized system of calling for ambulances at the Police Information Bureau should be continued for all emergency work.

The hospitals and public health agencies should discontinue the use of undertakers' invalid carriages for ambulance service.

V. Hospital and Dispensary Planning

COMMUNITY PLANNING

From the standpoint of the community, hospitals and dispensaries in Cleveland have been planted, rather than planned—planted each by itself instead of being planned as part of a community scheme for organized medical service.

The hospitals thus planted have grown, but have not grown fast enough to keep pace with the development of the city. This is even more true of the dispensaries, the starved children of the hospitals. The outstanding, almost tragic, fact in the situation of Cleveland is the shortage of 1,500 beds below present community needs, and the deficiency in dispensary service, which at present is not more than one-third of the needed amount.

These major needs are a challenge to the courage and resources of a progressive, self-confident city such as Cleveland. The passage of the City Hospital Bond Issue during the spring of 1920 for \$3,500,000 gives assurance that when the necessary steps of making plans, selling bonds and putting up buildings have been taken, at least one-third, or possibly half, of the needed 1,500 beds will be provided.

It was originally expected that the \$3,500,000 would be sufficient to construct 900 beds and a dispensary, tearing down the present psychopathic building of 200 beds, which is unfit for hospital use; and thus making a net addition of 700 beds. The City Hospital would then have practically 1,500 beds, and it should have this number as soon as possible. Since the figure \$3,500,000 was decided upon by the authorities, building costs have continued to rise, and (while the future course of prices cannot safely be predicted) it is probable that the sum will be insufficient to build any such number as 900 beds, besides a dispensary and necessary enlargements or improvements in nurses' home, power plant, kitchen, etc. The present city administration should proceed as rapidly as possible with plans and construction, making the \$3,500,000 go as far as it can, and all public officials and private persons who have the hospital interest of the city at heart should continue their efforts until the City Hospital has reached the needed size.

Privately supported hospitals must expect to provide 750 to 900 beds of the needed 1,500, as soon as possible, and also the dispensaries, as outlined in the discussion of that subject. An expenditure of probably \$12,000,000 for buildings must be faced by the people of greater Cleveland during the next few years.* This figure does not include such special provisions for research and medical teaching as may be provided in connection with the University Hospital. Of the \$12,000,000 it may be expected that two-thirds, or a little less, will have to be provided by private gifts, and about one-third, or somewhat more, by the municipality.

*This sum includes \$3,500,000 bond issue. At the time of concluding the Survey the bonds had been authorized but not marketed.

In one of the striking financial "campaigns" of recent years, the Jewish Community of New York City, with a population only slightly more than the total population of Greater Cleveland, raised more than \$7,000,000 for building funds for its various institutions. Cleveland has let its population grow faster than it has permitted its hospitals to grow. Atonement for the neglect of yesterday can only be made by dipping more deeply into the pocket today. Delay means only the incurring of still heavier future obligations.

It is greatly to be desired that in securing these building funds Cleveland shall pursue the policy already so finely established through the Welfare Federation in raising annual expenses. Joint campaigns for hospital building funds are the desirable method. Otherwise Cleveland will be weary with one hospital "campaign" following another, with the almost inevitable result that those which happen to have been unable to make campaigns first will suffer, and the response will be influenced more largely by chance than by relative need or merit. What is of even more importance is that balanced development will be less likely, because joint campaigning implies in a considerable measure joint planning, the mutual adjustment of plans to the broader needs of the community.

It is true that the present year, 1920, does not seem a propitious one for a large financial "drive" such as this building fund campaign would have to be. There are just two practical recommendations for those who ought to voice the need and lead the campaign to meet it: conviction and courage. There must be profound belief in the urgency of the need for more hospital beds and more dispensaries, and firm determination to meet this need at the earliest possible date.

PROJECTED ENLARGEMENT

The Survey found that a number of Cleveland hospitals had made plans for expansion. Three notable examples are the following:

The project of Lakeside Hospital to move from its present site near East Twelfth Street and Lakeside Avenue, to Wade Park, enlarging its capacity from 289 beds to 500 beds. In connection with this is to be mentioned the desire to move Maternity Hospital to the same area, and to enlarge it to 100 beds, as a part of the University Hospital group; and, the building of a hospital of 150 beds for babies and children, as part of the same group. The total for the group is 750 beds, making a net increase over present provisions in the same group of institutions of 400 beds.

The project of St. Luke's, to move from its present site on Carnegie Avenue to Ambler Heights, and to enlarge from its present capacity of 139 beds to 300 beds, a net addition of 161 beds, or, if the present hospital were retained and used for an enlarged dispensary and an industrial hospital of perhaps 100 beds, a net addition of about 250 beds.

The project of Huron Road Hospital to move from its present site on Huron Road, to Ansel Road and Wade Park, enlarging its present capacity of 84 beds to 250 beds, a net addition of 166 beds.

The plan of Lutheran Hospital to enlarge from 50 to 100 beds has already been put before the public in a campaign for the needed funds.

A number of other hospitals have stated to the Survey in more or less specific form their desires or projects for expansion. It will be observed that on the minimum basis of calculation the projects of Lakeside, Maternity, the new Babies' and Children's Hospital, Huron Road and St. Luke's would together bring a net increase of 727 beds minimum, or 816 beds maximum. In other words, these projects alone, if carried out, would provide most of the 900 beds which must come from private funds. It is to be desired, however, if a joint campaign for building can be organized and successfully accomplished, that the legitimate desires of some of the small institutions be recognized. It is particularly important that if funds cannot be asked for or secured sufficient to provide for the total amount required for the needs of all the institutions, that some of the smaller hospitals whose present buildings and equipment are now notably inadequate, shall be allotted sufficient amounts to enable them to make needed changes or improvements of a permanent or semi-permanent nature, even if their substantial program of enlargement must be postponed, and if the plans for the three largest hospitals have to be somewhat curtailed. For example, the improvement of the nurses' home at St. Vincent's or the provision of a dispensary at St. John's, are urgently required by present needs for better service, irrespective of increase in the number of beds.

In the rounding out of Cleveland's hospital facilities through the development of specialties, the increase of service to children is the most urgent need in both hospitals and dispensaries. The building of the proposed Babies' and Children's Hospital is perhaps the most greatly needed of Cleveland's hospital facilities, after the enlargement of the City Hospital.

There is need of enlargement of facilities for maternity care, and the program of Maternity Hospital to increase its size from 60 to 100 beds is approved. This, however, is not so urgent as a number of other needs, such as for children's beds, for an eye and ear hospital, or for the improvement in the plants and nurses' homes of several other institutions, such as St. Vincent's, St. Alexis, etc.

In the case of diseases of the eye, ear, nose, and throat, the deficiencies in Cleveland, as pointed out in the early part of this Report, are unusually serious. Many other cities have found it desirable to establish eye and ear hospitals. New York provides 608 beds; Boston, 219; Baltimore, 158; Portland, Maine, 100; Washington, 94; Philadelphia, 58; Pittsburgh, 40; and Chicago, 32. In Cleveland one hospital only (Lakeside) makes any special reservation of beds for eye cases. Six hospitals maintain an ear, nose, and throat service. There is no throat ward in the city. There are cared for in hospitals and dispensaries a relatively small portion of the eye, ear, nose, and throat work required by a population as large as that of Cleveland and its vicinity. No center exists for the training of physicians and nurses in these specialties. There are exceedingly numerous industrial eye injuries. All but one of the twelve oculists who responded to the Survey's letter of

inquiry stated that industrial eye injuries came to them with evidences of having been mishandled.

Of the 545 persons in the city known as totally blind, 306 cases may be considered as due to preventable diseases or injuries. In addition to this number, 121 cases are to be classed as curable.

It is therefore recommended that beds to the number of 100 be established for eye, ear, nose, and throat cases; these beds to be maintained preferably as a branch of an existing general hospital, or, if established as a separate hospital, to be in close cooperation with a general hospital, in order to secure the most economical administration and the mutual advantages of cooperation between the staff of the general hospital and the specialists in eye, ear, nose, and throat. It is essential that there be such freedom and independence for the eye, ear, nose, and throat staff as to enable the fullest development of the special facilities, technic, and educational opportunities, and if these conditions cannot be met were the beds to be part of a general hospital, the beds should be established as a separate hospital, with the affiliation indicated.

It is desirable that the hundred beds be divided between the ear, nose, and throat service, and the eye service, in the proportion of three to two; and that there be maintained a dispensary eye clinic and a dispensary ear, nose, and throat clinic, in connection with these beds. The clinics had best be parts of a general dispensary, but in any case the hospital staff should have direct medical control. It is of course highly important that the eye, ear, nose, and throat beds and clinics be used for medical teaching purposes, under-graduate and post-graduate, and for nurses. It would be well that there be provision among the institutions affiliated with these special beds for an exchange of visiting physicians and surgeons, and of nurses in training.

Provision for all other specialties, such as orthopedics, and laryngology, should be made by the development of services in general hospitals, with an assigned number of beds and with possibly the addition of more beds or pavilions at a future date, rather than by the construction of new important specialized hospitals. The special hospital has a place during the period of development of the technic of a specialty; but the permanent provision of hospital facilities in special branches is better and more economically made by divisions of general hospitals.

LOCATIONS AND RE-LOCATIONS

The study made by the Survey of the locations and inter-relations of hospitals in Cleveland has led to approval of the plans of Lakeside, Huron Road, and St. Luke's hospitals to move from downtown locations to sites in the eastern part of the city, in or near Wade Park. Prevailing winds in Cleveland are from the west, and sites in the eastern part of the city will continue to be dirtier than locations on the western edge, until Cleveland deals effectively with its obnoxious coal smoke. It must be pointed out, however, that the moving-out of these hospitals and the closing of St. Clair

Hospital, which the Survey has recommended, will leave the central portion of the city practically unprovided with local hospital facilities. With adequate ambulance service, such as Cleveland should demand and secure (see discussion of this subject), location will be rendered a secondary factor in a large proportion of hospital cases, yet the tremendous volume of hospital cases arising out of the downtown area cannot but require some local provision.

It will be necessary to retain either at Huron Road or at Lakeside, or in perhaps a new hospital, from thirty to fifty beds, preferably affiliated with a larger out-lying institution so as to secure the advantages of lowered cost and better medical service. It would be more economical if the present site and part of the present buildings of Lakeside or Huron Road were utilized for this purpose instead of requiring new construction.

As outlined in the section on the downtown dispensary, this downtown hospital should be part of the same plant as the new proposed downtown dispensary.

In the chapter on dispensaries and in the chapters just preceding, the need for the development of several additional dispensaries, particularly on the west and south sides was pointed out, and the particular institutions named.

All of these points regarding the location of hospitals and dispensaries and their inter-relation need to be thought out as part of a comprehensive plan for providing general service to the city as a whole, and also local facilities of various kinds, readily accessible to each district. In previous sections of the report it has been brought out that certain of the larger hospitals have a wide range, drawing patients from all over the city and from outside the limits of Cleveland; that other hospitals are largely local in their clientele. The same is true of dispensaries, some being city-wide in their range, others serving few patients outside of one general section of the city, while the health centers are definitely restricted to a certain comparatively small area, as preventive work must be in order to be effective. Certain principles underlying community planning of the number and location of hospitals and dispensaries may be formulated as follows, as the conclusion of this section.

PRINCIPLES OF COMMUNITY PLAN

There should be a small number of what may be called major hospitals and dispensaries, equipped with everything in the way of modern diagnostic and therapeutic equipment. These major hospitals and dispensaries are expected to be city-wide in their range, and to serve particularly for receiving difficult cases from within and outside the city, for consultation purposes and for diagnosis. In Cleveland the new City Hospital with its dispensary should serve as such an institution for the west side. Lakeside, in its present location or in its enlargement as part of the University group, would serve in this capacity also. Mount Sinai and St. Vincent's may be mentioned also, and a few other hospitals, such as St. Luke's, may develop on a similar

grade, although the teaching hospitals and dispensaries should be the distinctive institutions of this class and every effort should be made to render them capable of measuring up to this responsibility fully.

What may be called the district hospital, with its district dispensary or out-patient department, may next be mentioned. In this group may be included the bulk of the hospitals of Cleveland, the range of which is not strictly confined to a given district but which are more local in character and which may not usually expect any large consultant or diagnostic service such as would go with the teaching institutions. Somewhat less elaborate and expensive equipment and a less high degree of specialization in medical organization may be expected in this group of institutions. It may be pointed out that such institutions fill a necessary and most worthy place in the scheme of hospital and dispensary care to the people of large cities.

Finally come the health centers, primarily preventive in their activities. More and more as the years go on, various therapeutic services of the simpler kind need to be located in as many neighborhoods as possible, because the more localized is their range, the more intensively and effectively can they reach 100 per cent. of the population with a message of hygiene, with periodical examinations for the detection and prevention of disease, with service for the prevention of infant and maternal mortality, the discovery and control of tuberculosis, and the detection of remediable physical defects of school children.

The health center should aim to reach the entire population of its district for preventive purposes, sending cases in which defect or disease is discovered, either to the family physician or to an appropriate dispensary or hospital, or in the case of difficult problems, directly to the major institutions for diagnosis. The combination of some of the simpler forms of curative work with the educational and preventive services is a necessary development of the health centers of the future. It may be pointed out that the proposed downtown dispensary and emergency hospital which will be permanently needed in the downtown section after Lakeside and Huron Road move, will be largely a reference center for preventive as well as for diagnostic and curative purposes. Particularly in a city like Cleveland, with its important medical school, the institutions doing the teaching must bear the primary responsibility, in hospitals and in out-patient clinics, for diagnostic service for the patients of private physicians as well as for the patients who cannot afford to pay a physician. The medical profession should reap the benefit of the development of more extensive services in the health centers and in the district hospitals and dispensaries. Appointments therein as staff or auxiliary members and the benefits of their facilities for consultation and diagnosis, should supply the most serious present deficiencies in what the local practitioner has to offer his patients.

It is evident that the danger of a "community plan" is that it leads us to glittering generalities merely. But it ought to be obvious that the absence of a community plan leads to anarchy. Cleveland has taken a long step away from the state of anarchy which characterizes the medical institu-

tions of most large cities, through its Hospital Council and its Welfare Federation. Any community plan which exists not merely on paper but which is a living thing with muscles and teeth, requires that individual institutions must adapt their policies and programs accordingly.

Sacrifices of policies or programs which seem desirable and legitimate from the standpoint of an individual institution may be called for by its proper adjustment to larger community needs. It seems hard, at times, to expect a worthy institution to say "no" to the eager desire of its staff for a program of expansion which a community Survey shows is more than is required by the institution's district or by the particular kind of need which it serves; yet at times such negative prescriptions are wise and necessary, and should be self-imposed. It is not too much to expect of the hospitals and dispensaries of Cleveland that they have a community plan. It is not too much to expect that they abide by it, living not as bachelors and spinsters who have only themselves to consider, but as members of a family each of whom shares, nourishes, and is nourished by the life of the whole.

INDIVIDUAL HOSPITAL PLANNING

Wise planning of a hospital's policy involves at least four elements:

Adaptation of the work, as to kinds of service offered, rates charged, etc., to the community, the district and the hospital's special clientele.

Such adaptation should be based on knowledge, perhaps requiring special study of the social as well as the medical character of the hospital clientele, as discussed in the section on "The Human Problem of the Hospital Patient."

The Cleveland Hospital and Health Survey has rendered to the governing authority of each hospital in the Council a report, the recommendations of which, as to policy and administration, are the result of such study. Each hospital has thus had a cross section of the situation and needs of 1920, as judged by the Survey.

Periodical Self-Surveys, based on continuous critical observation of the hospital's work, by its trustees, staff and executive officers, and fortified by outside reports and special studies. As urged below, annual reports should serve as the basis for annual self-contemplation, but for a critical review and continuous effort toward better service.

Long-range planning of program. Each hospital should look as far as possible, studying out its present and future needs, (a) as to kinds of service which it should render and (b) as to the building, equipment, organization and personnel which it needs to have in order to render these services.

Some of the few hospitals of Cleveland are suffering today because no comprehensive plan was made in the past, and additions have been made to hospital buildings which now make a badly balanced plant. Often the service wings, the nurses' home, or the power plant were not provided for sufficiently when additions were made to bed capacity, or were not planned with a view to easy enlargement when the number of beds should be increased. A comprehensive plan which may be many years in realization would prevent one-sided and ill-judged extensions either in plant or in branches of service. Expert advice and assistance could be provided for many instances by the Hospital Council or the Welfare Federation in connection with long range planning of each hospital, although of course in case of small institutions, or where extensive future building plans are involved, the aid of a hospital architect or consultant may be desirable.

Annual Reports to the Welfare Federation and to the Public.

Until recently, each hospital in Cleveland as elsewhere, depended on its particular list of financial supporters. Each hospital usually prepared an annual report more or less especially designed to express that quality of hope which has been described as a "lively expectation of favors yet to come."

The situation was radically changed when there came about joint financing through the Community Fund. The individual hospital no longer made a direct public appeal for its own support. Such joint financing is desirable on the whole, but certain minor defects or difficulties must

be guarded against. One of these is a diminished incentive to prepare an annual report. It is true that under such a system as that of the Welfare Federation, each institution must present its budget and the financial and service data required by the Welfare Federation so that the appropriating committee shall be in a position to reach a wise decision. Nevertheless, there is no longer the same sense of direct relationship with the public, and a more or less definite public at that. After all, one of the great values of periodical reports ought to be the stimulus to the people who make them (which mere compilations of financial and statistical data do not provide). Preparation of a report ought to mean the formulation of fairly definite ideas about the work and needs of the matter reported on. It will mean this if the basal scheme of the report is properly designed.

Recognizing this, the Welfare Federation and the Hospital Council should expect their member institutions to render not only the necessary statistical and financial data but also real reports to the public. The future of joint financing depends upon maintaining active public interest in the work to be financed. There must be meat upon which this interest may feed. Concrete facts are the basis.

There should be three types of reports furnished to the public either directly or through the Welfare Federation or the Hospital Council:

1. *Summary report of hospital and dispensary work in Cleveland, taken as a whole, including the elementary data showing bulk and general types of service rendered, income and expenses.*

This should be prepared under the auspices of the Hospital Council and published by the Welfare Federation. A form for such a report is suggested and may be found in the appendix, Table IX. This may well be compared with the Summary Annual Report of the United Hospital Fund of New York City, the pioneer undertaking of its kind in this country.

2. *A report from each hospital to the Hospital Council and the Welfare Federation, giving the technical figures not only of bulk and general types of work but the details of service and results; of cost in relation to units of service; and of income and its various sources.*

The monthly and annual report forms prepared by the Hospital Council for the use of its members have served a highly useful purpose. They may be slightly developed further to advantage, and should be made uniform with the reports required by the Welfare Federation. The Hospital Council annual report form is believed to furnish so desirable a basis that no other form will be outlined here. It is suggested that the form might be somewhat smaller and easier to use if some of the items which are extended over many lines were put into more condensed and tabular form. These and other details should be adjusted so far as possible in order that this form shall be comparable with that required by the State Department of Health. Thus the labor of filling out two forms will be reduced to a minimum.

It is recommended that the following items be included in the report form:

Percentage of bed days care given in comparison with total possible number of days care in each division of the hospital, and for the hospital as a whole (monthly and annual.) The extent to which it is possible to subdivide the different sections of the hospital will depend on the degree to which the hospital is itself sub-divided into buildings or separate units, and the degree to which groups of wards or rooms are definitely assigned to particular services or classes of patients.

The number of visits and number of new patients in each clinic or division of the dispensary should be shown as well as the figures for the dispensary as a whole; the average number of visits per patient for each, and the average attendance per clinic day. Thus in tabular form:

CLINIC REPORT FOR MONTH (OR YEAR) FOR DISPENSARY OF.....						
	Name of Clinic	No. of Visits	No. of New Patients	Av. No. of Visits per Patient	No. of Clinic Days	Av. No. of Visits per Day
Medical						
Surgical						
Pediatric						
Eye.....						
Dermatological....						
Etc.....						
Total.....						

If evening clinics are conducted on a different financial basis (pay clinics) from the corresponding day clinic these should be shown separately.

The cost of the dispensary and the income from its operation in relation to cost should be shown. Income from operation may well be classified into admission fees, treatment fees, fees for medicines.

As soon as the accountant service of the Welfare Federation (as recommended in the sections on administration) is in effective operation, all hospitals would be in a position to show the costs for the main divisions of their work, as well as for the hospital as a whole (average daily per capita) and for the average daily cost for provisions per capita. In so far as it is possible to state relative costs for private room and for ward service, this should be done.

As soon as possible a report on results of service should be developed. The usual report of "condition on discharge" as "cured," "improved", "unimproved", "died", is definite only in the last item; has practically no medical or social value and is not worth including in hospital reports. Real

reports of results of care of patients can develop only as the outcome of a real follow-up system. As individual hospitals develop these, a summary report of results of care should be included in the annual report form. It would be well at once to include the following items in the form under the heading:

“DISPOSITION OF PATIENTS AT DISCHARGE.”

Total patients discharged.....

Of these, patients died to the number of.....

Remainder.....

Disposition of these as follows:

	Private		Ward or Staff	
	Patients		Patients	
	No.	Per cent.	No.	Per cent.
1. Referred to home under care of private physician.....				
2. Referred to another hospital.....				
3. Referred to convalescent home.....				
4. Referred to dispensary supervision.....				
5. Referred to patient's home without arrangement as to care				
6. Other reference.....				
7. Left against advice.....				
8. Unknown or no record.....				
<hr/>				
Total.....				

The use of such data showing administrative action at the time of discharge will be a definite stimulus toward better follow-up and convalescent care.

3. The third form of report from the hospitals should be not statistical but interpretative; a statement of progress and of problems, of accomplishment and of needs.

The traditional annual report has done this in a measure but has often been written by committee members who had little first-hand contact with the facts, or very slight conception of what should be said except thanks to other committee members and to staff and supporters, so that it largely failed to accomplish any real purpose. An annual report should be built from the ground up. The medical executive committee and the head of each main administrative department should be asked to turn in a report

their several fields six weeks before the report is to be issued. It should be expected that besides certain statistical or other facts relative to the work of the department, these reports shall contain a summary of (a) accomplishments of the year—items felt to be indications of progress; (b) present problems and needs; (c) definite requests and recommendations for action. In some hospitals, each chief of a medical, surgical, or special division, the head of the laboratory, and the head of the X-Ray department will be asked to render reports as well as the medical executive committee.

The reports from the head of the nursing, and from the head of social service, should pass through the training school committee or the social service committee, respectively, before coming to the superintendent and to the trustees. The committee may write its own report if desired, but in any case should state its comment upon the recommendations presented by the executive.

It is recognized that securing reports from many medical and departmental heads is not always easy and that the reports are not always well prepared or to the point. Much of this difficulty has been due to failure on the part of the Superintendent or trustees to give to those writing reports a definite idea as to what was expected.

The superintendent's report to the trustees should be a real survey of the hospital, its accomplishments, problems and needs, and should include recommendations. Trustees who do not receive that type of report either do not know how to get, or do not get, the best out of the man or woman whom they employ as superintendent.

On the basis of such reports from their executive officer and their departments, and of conference with them, the trustees should be in a position to know what they need to know to plan the coming year's policy and program, and the amount of money they need to secure. The reports should be the basis of the presentation of the hospital's needs to the Welfare Federation and should be accessible to those having a basis for definite interest therein.

The trustees ought not to have to prepare a detailed report, but merely a brief statement of decisions or recommendations for which the other reports are the foundation. A group of reports thus prepared should constitute a real annual self-survey. This need rarely be printed as a whole. There is required something less technical for a published report.

INTERPRETING HOSPITAL TO PUBLIC

It is essential from the standpoint of maintaining the interest of the public in a hospital and dispensary and of stimulating boards of trustees of the institution itself, that technical facts of such reports be interpreted in terms of ordinary items of interest and of every-day human standards of health and well-being. This is not usually within the capacity of the hospital administrator or trustee.

The hospital needs, and the Welfare Federation should furnish each hospital, the service of a publicity expert, just as it provides the service of an accountant for the technical data. The publicity man would help the hospital to put its technical facts in common terms, to connect them with ideas and interests which the average man readily understands and appreciates.

The use of such a statement, put into form with the advice of the publicity man, would be partly for those particularly interested in the hospital, and partly for other hospitals and the general public, reached through the Welfare Federation and the press. The custom of presenting reports at an annual public meeting of the trustees or members of the hospital corporation is useful if only that it gives to reports a certain news value.

Under present conditions in Cleveland, the trustees of hospitals are freed from the necessity of the continuous pursuit of the vocation of honorable begging, the most characteristic occupation of trustees in most communities. They may ordinarily concentrate their financial efforts within a brief period of the year, and be free at other times to give their attention to administration, and planning for the hospital. It is above all, important that in working out and planning the present and future policy of individual hospitals, the trustees, the staffs, and the executive officers keep always before them the conception that the hospital is an agent for service to the community, and not an institution with all its roots in its own soil. There is marked danger that those who work within the four walls of an institution lose touch with outside interests and agencies, and develop the ingrowing rather than the outlooking mind. This danger is particularly apparent in such a highly specialized technical service as that of a hospital. A well-managed dispensary tends to assist hospital trustees, staffs, and administrators to keep in touch with the community, because a dispensary is less rigid, less walled-in than a hospital proper, and helps in achieving a practical combination of administrative efficiency with human adaptability. Hospitals closely connected with a church organization appear in some cities particularly prone to be over-institutionalized. The public spirit and community interest manifested by such hospitals as St. Vincent's and St. John's should be mentioned as notable illustrations of a different point of view in Cleveland. Such a cooperative organization as the Cleveland Hospital Council has undoubtedly assisted all hospitals to think in terms of larger units than themselves.

ORGANIZATION TO CARRY OUT PLANS

Planning for individual hospitals and planning for the hospitals and dispensaries of a community as a whole will yield little practical result unless there is community organization of the right sort. In Cleveland we may classify the community functions and organization in two groups, those under public auspices (municipal or state) and those under private auspices, affiliated as members of the Welfare Federation and the Cleveland Hospital Council.

An institution dealing with so serious a matter as treatment of illness is a responsibility to the public which should be recognized by a certain degree of public supervision. By a recent law, the Department of Health of the State of Ohio was empowered to register, define, and classify all hospitals and dispensaries, to require hospital reports, and to license maternity hospitals. It is deemed desirable that these public supervisory powers be extended as follows:

(a) Every hospital and dispensary should be required to obtain a license to operate from the State Department of Health.*

(b) Such license should be issued for a term of one year, renewable by the Department.

(c) Licenses should be revocable for cause, provided that notice of reasons shall be given in advance to the institution and also an opportunity for a public hearing when requested.

(d) Hospitals and dispensaries incorporated as charities should be licensed without fee and a small license fee should be charged to institutions which are incorporated for profit.

(e) Inspection by the State Department of Health should be provided for and appropriation made for a staff to perform this work.

The State Department of Health should be empowered to outline and prescribe requirements or standards under which licenses should be issued and under which hospitals and dispensaries may operate.

The administrative powers of the State Department of Health should be exercised by this Department throughout the State, except in chartered cities. Such cities should be authorized to pass laws or ordinances (the constitution provides that they shall not be inconsistent with the existing state laws) and to administer the licensing and inspecting powers above provided under its own local authority.

*It is the opinion of Doctor Babcock, who has collaborated on this study, that this is an undesirable administrative responsibility to place on state authorities.

The State Department should administer the law directly in those cities or other political subdivisions which do not maintain their local administration under their own auspices. The State Department of Health should in all cases continue to receive annual reports from hospitals and dispensaries and to maintain a register of all licensed institutions. No chartered city should be permitted to prescribe or tolerate standards for the maintenance or licensing of hospitals or dispensaries which fall below those prescribed by the State Department of Health.

If there were no other reason than the existence in Cleveland of a number of commercial hospitals, this would be sufficient for the extension of the powers of the state and the administration of these powers in Cleveland by the municipal government. The inspection made by the Survey of the sixteen institutions not members of the Cleveland Hospital Council revealed the fact that while a few are of the public-service class and a few others are well-conducted proprietary institutions giving a fair standard of care to their patients, the remainder are utterly unworthy of existence. In six cases no graduate nursing service whatever was provided for the sick patients. In more than one instance, the buildings were dirty and the patients appeared to be physically uncared for.

Proprietary hospitals have a legitimate place, but making a profitable business out of the improper care of the sick is intolerable, and can be prevented only by public authority. The State, utilizing as proposed the machinery of the city government in the larger communities, has the right and duty to set minimum standards to which every institution treating the sick shall conform, and to enforce such standards through appropriate agents. Such a policy does not mean interference in hospital management by the state or city, or public regulation of hospitals in any detailed sense of the term. It means the securing of such facts as shall enable the public to be protected against an unworthy and improper class of institution—leaving the majority, which are far above this class, free to conduct themselves as they will.

It is important in a community program for dealing with hospitals and dispensaries, that the municipal agencies caring for the sick shall be properly related to the private agencies, and this has been notably achieved in Cleveland through the Hospital Council. The City Hospital is a member, as well as the privately supported institutions.

The broader interests of the city in public health (in which the hospitals are also concerned) should be brought into closer touch with private agencies interested in such subjects, through some such means as the proposed Cleveland Public Health Association (see Part II.). In the opinion of the Survey, the relations between the Welfare Federation, the Cleveland Hospital Council, and the individual institutions should be somewhat as follows:

OUTLINES OF COMMUNITY ORGANIZATION

1. It is the function of the Welfare Federation to deal with questions of general policies in relation to large groups of welfare agencies and in particu-

lar to provide machinery for joint financing and suitable apportionment of funds raised.

It is highly desirable and has been elsewhere recommended by the Survey (Part II.) that the Welfare Federation have on its executive staff an assistant to its general director, who will be an expert in the health field, and who will be able to advise the director on the many problems in this field to which the Federation devotes over one million of the four million dollars raised annually by the Community Fund.

2. Within the hospital and dispensary field, the Hospital Council should outline standards for hospitals and dispensaries, covering minimum requirements in:

(a) Organization (board of trustees, superintendent, staff, nursing, etc.) for hospitals and dispensaries.

(b) Medical work (examinations, use of laboratories, records, internes, private and ward patients).

(c) Finance and accounting.

3. Only hospitals complying with these standards should be admitted or retained as members of the Council.

4. Only hospitals in the Council should be assisted by the Federation.

5. Financial support by the Federation should be on the basis of charitable work, which should be taken to include free service and also part-pay service, rendered in hospital beds or in dispensary clinics.

6. Appropriations for the support of dispensary work should be separated from those of hospital work, since the units of service are different.

7. Municipal hospitals, and also hospitals not doing charitable work as above defined but complying with the standards, may be members of the Council and the Federation, and receive the benefits of such membership (they will not of course need financial aid).

PLACE OF HOSPITAL COUNCIL

The Cleveland Hospital Council has been of such great value to Cleveland and indeed to the state and the country that too much emphasis cannot be laid upon the importance of its adequate maintenance and development. It has brought the hospitals of the city together for cooperative work, and for mutual improvement in many respects. Advantageous legislation in connection with hospital service and public health work has been promoted by the influence of the Council and by the activities of its executive secretary. Certain of the technical standards, forms of report, etc., as outlined by the Council have been made use of by institutions and by official bodies in other parts of the United States.

The Central Purchasing Department of the Council has been and is a valuable contribution to the economy of hospital administration. The amount of purchasing done (for hospitals alone) for the first half of the year 1919 was \$90,890.89; for the entire year of 1919, \$268,503.07; and for the first six months of 1920, \$222,278.97. It will be noticed that the purchases for the first half of 1920 almost equal the purchases for the entire year of 1919. It is estimated by the Department that there has been a saving on the large purchases for the first half of 1920 to the amount of \$10,000.00, and that there was also considerable saving on the small purchases, although no definite estimate can be furnished of this.

Consideration should be given to the transfer of the Purchasing Department from the auspices of the Hospital Council to those of the Welfare Federation, in order that the range of service of the Department may be widened; or the Council might offer the services of the Department to Federation organizations which are not members of the Council.

The opportunities for service by the Council to the hospitals of Cleveland are increasing steadily in proportion as the hospitals appreciate more and more the advantages of cooperative activity in administrative directions, for the sake of economy and efficiency, and of conferences and discussion for more effective formulation of policies concerning hospital service.

The development of a dispensary section of the Hospital Council for purposes of improvement of dispensary service which is recognized as an urgent need throughout the city, is now an important activity which naturally belongs within the general scope of the Cleveland Hospital Council.

Almost endless opportunities exist for service to hospitals through the expert services of the executive staff of the Council, which should assist the members in an advisory way through their own efforts and through assembling information, arranging conferences, securing expert advice from other sources, etc. Many of the recommendations made by the Survey to individual hospitals, particularly those of moderate or small size, will doubtless cause these hospitals to appeal to the Hospital Council for advice in helping them to work out details of such recommendations as are approved in general by the hospital trustees. The interest of the hospitals in legislation will continue to call for some activity in this direction on their part each season.

The organization and staff of the Hospital Council does not appear adequate at present to meet these demands, but it is of the highest importance to the best advancement of hospital and dispensary service in Cleveland that the Council equip itself to carry its increasing responsibilities. It may be noted that the time has probably arrived when a substantial share of the work in initiating and promoting legislation, in which the Council has achieved so much success, may be taken over by the Ohio State Hospital Association. This would seem a logical development.

It is recommended that the proposed Central Dispensary Committee be made part of the activities of the Hospital Council as soon as the Council staff is able to carry the additional work.

HOSPITAL STANDARDS

Membership in the Hospital Council should mean to other hospitals and the public, the acceptability of the hospital according to standards of good organization and management. The chief present deficiency of the Council is due to the fact that hospitals have been accepted as members whose standards have been too far below those of the average maintained by the Council, not as high, in one or two institutions, as a few hospitals not members of the Council. It is recognized, however, that in the initial formation of the Cleveland Hospital Council, it was not practicable to define or enforce standards very definitely. The time has now come, however, when definite minimum standards of admission should be publicly known as well as professionally enforced. The Council, through its committees, officers, and executive staff, should be the democratic professional agent of the hospitals and dispensaries, themselves, for their own improvement; and should be the advisor of the Welfare Federation on technical questions concerning hospital and dispensary functions and standards.

The state and city governments, through the regulative acts proposed, should set minimum standards and an institution which does not comply with these should not be allowed to operate at all. Between the minimum standards and the desirable hospital standards is a considerable zone. The Hospital Council should not take in this twilight zone, but should always encourage and assist institutions which are within its shadow to move as quickly as possible up into the light.

With such relations between the state and city governments, the municipal hospital, the Welfare Federation, and the Cleveland Hospital Council with its hospital and dispensary experts, it is believed there will exist in Cleveland the machinery for the continued advance of hospital and dispensary standards of administration. If such progress is suitably reported to the public through the individual hospitals and through the general activities of the Council and Federation, growing interest and backing for hospital and dispensary work should be annually manifested, expressing itself in more intelligent policies, fuller cooperation, and larger funds for maintenance and for permanent improvement.

But organization after all is only machinery. It is the ideals and spirit of individuals and of small coherent groups working together, which provide the motive power that drives institutions and communities onward. The schemes of organizers, publicity men, and financiers, can make the path easier and lessen friction during the forward movement, but the goal-posts, guides, and impelling forces, for community and institution alike, depend on the intangible elements of the individual soul and the civic spirit. Cleveland impresses every investigator with its eager readiness for cooperative activity. With such a community spirit, there is indeed the danger that attainment shall be measured too easily in terms of catch-words and slogans, and not enough by the more abstract but more fundamental tests

of technic. It is for the development of a high degree of well-founded professional achievement with no loss of its present splendid tradition of community endeavor that every lover of Cleveland must hope.

TABLE I

HOSPITALS AND DISPENSARIES IN CLEVELAND
Institutions Members of Cleveland Hospital Council

	Hospital Beds	Dis- pensary Visits, 1919		Hospital Beds	Dis- pensary Visits, 1919
Babies' Dispensary and Hospital—2500 East Thirty-fifth Street.....	34*	14,977	Provident Hospital—624 East 103rd Street.....	29	
Cleveland City Hospital— Scranton Road.....	785		Rainbow Hospital—South Euclid, Ohio.....	85	
Cleveland Maternity Hos- pital—3735 Cedar Ave.....	60	3,688	St. Alexis Hospital—5163 Broadway.....	250	
Fairview Park Hospital— 3305 Franklin Avenue.....	85		St. Ann's Maternity Hos- pital—3409 Woodland Av.	55	
Glenville Hospital—701 Parkwood Drive.....	74		St. Clair Hospital—4422 St. Clair Avenue.....	43	
Grace Hospital—2307 W. Fourteenth Street.....	35		St. John's Hospital—7911 Detroit Avenue.....	150	
Huron Road Hospital—748 Huron Road.....	84	5,864	St. Luke's Hospital—6606 Carnegie Avenue.....	139	13,313
Lakeside Hospital—East Twelfth and Lakeside Av.	289	59,891	St. Vincent's Charity Hos- pital— Central and East Twenty-second Street.....	290	21,863
Lakewood Hospital—14519 Detroit Avenue.....	53		Warrensville Tubercular Sanitarium, Warrensville, Ohio.....	270	
Lutheran Hospital—2605 Franklin Avenue.....	50		Woman's Hospital—1948 East 101st Street.....	37	
Mount Sinai Hospital— 1800 East 105th Street....	225	19,324			

*In summer only.

Institutions Not Members of the Cleveland Hospital Council

	Hospital Beds	Dis- pensary Visits, 1919		Hospital Beds	Dis- pensary Visits, 1919
Carnegie Avenue Hospital			Holy Cross House—9014		
4 Carnegie Avenue..Unknown			Cedar Avenue.....	50	
Mineral Fumes Treat-			Joanna Private Hospital—		
—8101 Hough Ave..Unknown			933 East Seventy-eighth		
and Emergency Hos-			Street.....	9	
—1780 East Fifty-			Kate Castle Rhodes Babies'		
Street.....	22		Dispensary—12611 Madi-		
and Home Hospital			son Avenue, Lakewood.....		
7 Prospect Avenue..	10		†Neal Institute Company—		
nt Hospital and Sana-			3920 Euclid Avenue.....	Unknown	
um—1770 Delmont			†Ohio Sanitariums Com-		
ue.....	Unknown		pany—14822 Terrace		
Invalids' Home—			Road.....	Unknown	
Addison Road.....	46		†Orthopedic Institute—1936		
Cleveland Hospital—			East Sixty-sixth Street.....	Unknown	
Euclid Avenue.....	31		†Reliable Invalid Home—		
Fifty-fifth Street Hos-			2222 East Eighty-ninth		
—2415 East Fifty-			Street.....	Unknown	
Street.....	60		Rest-Cure Hospital and		
Seventy-ninth Street			Sanatorium—2453 East		
ital—1873 East Sev-			Fifty-fifth Street.....	16 (in use)	
ninth Street.....	24		St. Mark's Hospital—629		
Jennings Home for			Eddy Road.....	45	
ables—10603 Detroit			Salvation Army Rescue		
ue.....	26		Home—5905 Kinsman		
Avenue Hospital and			Road.....	54	
orium—9810 Euclid			U. S. Marine Hospital—		
ue.....	Unknown		1041 Lakeside Avenue.....	86	4,493
ce Crittenden Home			Windsor Sanatorium—4415		
Eddy Road.....	12		Windsor Avenue.....	38	
Hitchcock's Private			Wright's Hospital—18902		
ital—5013 Prospect			Nottingham Road.....	10	
ue.....	15		Y. W. C. A. Retreat—4916		
			St. Clair Avenue.....	Temporarily Closed	

stitutions not reported as registered with the State Department of Health up to June, 1920.

Public Health Dispensaries

Health Center No. 1—1510 East Forty-ninth Street.
Health Center No. 2—502 Central Ave.
Health Center No. 3—2810 Seymour Avenue.
Health Center No. 4—5825 Cable Ave.
Health Center No. 5—9206 Woodland Avenue.
Health Center No. 6—10126 St. Clair Avenue.
Health Center No. 7—6100 Pear Avenue.
University Health Center—2739 Orange Avenue.

Prophylactic Baby Stations—

5706 Clark Avenue.
7654 Broadway.
12510 Mayfield Road.

4247 Pearl Road.
833 East 152d Street.
3008 Bridge Avenue.
2511 East Thirty-fifth Street.

Prenatal Clinics—

Maternity Hospital Dispensary—2509 East Thirty-fifth Street.

(Sub-stations)

2749 Woodhill Road.
Alta House, 12510 Mayfield Road.
2317 Lorain Avenue.
Goodrich House, 1420 East Thirty-first Street.
East Forty-ninth and Fleet Street.
Mount Sinai Hospital—1800 East 105th Street
St. Luke's Hospital—6606 Carnegie Avenue.

TABLE II
PERCENTAGE OF OCCUPANCY OF HOSPITAL BEDS

HOSPITAL	Beds* 1919	Per Cent. Occupied 1919	Per Cent. Occupied 1918	Per Cent. Occupied Census Days Averaged
City.....	785††	60.3	82.2	70.0
Fairview Park.....	85	60.4	62.3	67.6
Glenville.....	74	66.3	72.3	69.0
Grace.....	35	66.8	52.7	94.3
Huron Road.....	84	75.0	68.2	86.9
Lakeside.....	289	90.8	82.6	72.9
Lakewood.....	53	45.9	40.7	68.0
Lutheran.....	50	80.9	70.5	93.0
Maternity.....	60*	79.9	70.3	71.7
Mount Sinai.....	225†	72.4	81.7	84.2
Provident.....	29	40.5	49.4	65.5‡
St. Alexis.....	250	78.1	78.0	97.8
St. Ann's.....	55**	Unknown	75.0	93.7
St. Clair.....	43	40.2	58.6	33.7
St. John's.....	150	Unknown	79.0	90.1
St. Luke's.....	139	75.8	71.6	95.3
St. Vincent's.....	290	66.9	58.1	73.0
Woman's.....	37	76.0	Unknown††	Unknown

*For maternity cases, adult beds only were included, except for Maternity Hospital for 1919, which was figured on a basis of 60 mothers and 33 cribs, as the bed days reported included both mothers and babies.

†Mt. Sinai for 1918 was figured on a 155-bed basis; for 1919 on a basis of 155 beds for February and March, and 225 for the remaining ten months.

‡Provident furnished data for the first Survey Census day only.

**St. Ann's figures for 1919 were not furnished.

††No definite information was available regarding beds at Woman's for 1918.

‡‡City was figured on basis of 650 beds until December, 1918, and 785 beds thereafter. Since the field work of the Survey was completed, figures were furnished by the City Hospital Administration, based on 725 beds which were available for 1919, instead of 785. This gives the percentage occupied for the year in the hospital as a whole, as 66.5 per cent. Further details of importance regarding City Hospital will be found in the foot-note, page 834.

TABLE III
HOSPITAL BEDS ACCORDING TO HEALTH DISTRICTS*

ct	Type of District	Popula- tion of District	Hospitals in District	Total Hospital Beds in District	Beds to 1000 of Population of District (Census I)	Hospital Cases to 1000 of Pop- ulation of District (Census I)
.....	Factory.....	82,185	Lakeside..... St. Clair Cleveland Emergency	429	5.2	2.7
.....	Factory, Congested	42,159	Huron Road.....	84	2.0	3.5
.....	Near Congested.....	130,775	City..... Grace	820	6.3	1.2
.....	Factory, Congested	164,094	St. Alexis..... East 79th Florence Critten- den Joanna Private	293	1.8	1.2
.....	Part Congested	136,294	St. Luke's..... Holy Cross Salvation Army Rescue Home Woman's	280	2.1	1.9
.....	Industrial.....	176,836	Glenville..... Mount Sinai..... Provident St. Mark's	373	2.1	2.1
.....	Semi-congested	90,766	Fairview Park	285	3.1	2.1
.....	Congested.....	72,168	Maternity..... St. Ann's St. Vincent's East 55th Street Cleveland Home Mrs. Hitchcock's Private	490	6.8	4.1
de			Lakewood.....	53		
			Rainbow	85		
is...			Warrensville Tu- berculosis Sana- torium.....	270		
			Wright's.....	10		
			East Cleveland	31		

It will be observed that the population figures are those which were furnished the Survey from local sources, and are higher than those given in the 1920 census. For the sake of uniformity, these estimated population figures have been used throughout this table since its purpose is primarily the comparison of different districts, and census figures for anything except the city as a whole were not available at the time of writing this report.

TABLE IV

**PERCENTAGE OF HOSPITAL PATIENTS COMING FROM HEALTH
DISTRICT IN WHICH HOSPITAL IS LOCATED
(First Survey Census Day)**

Cleveland City.....	4.6	Mount Sinai.....	31.2
Cleveland Maternity.....	13.7	Provident.....	78.9
Fairview Park.....	36.7	St. Alexia.....	35.9
Glenville.....	46.7	St. Ann's.....	59.8
Grace.....	32.3	St. Clair.....	28.6
Huron Road.....	6.6	St. John's†.....	
Lakeside*.....		St. Luke's.....	15.6
Lakewood†.....		St. Vincent's.....	0.0
Lutheran.....	44.2	Woman's.....	26.0

*Address not furnished for 52 per cent. of patients.

†Hospital outside city limits of Cleveland.

‡Address not furnished for 59 per cent. of patients.

TABLE V

**PERCENTAGE OF CASES, CLASSIFIED ACCORDING TO COMPENSATION
FOR CARE, ADMITTED THROUGH VARIOUS SOURCES TO
THREE LARGE GENERAL HOSPITALS**

**Patients Admitted to Hospital No. I., Classified According to Compensation for
Care, and Source of Reference**

	Percentage of total admissions	Percentage referred by staff physicians	Percentage referred by non-staff physicians	Percentage referred by by charitable agencies	Percentage not classified	
Patients paying full cost of care.....	41.9	53.0	43.2	2.2	1.6	100%
Patients paying part of cost of care.....	20.8	39.3	40.5	20.2	0.0	100%
Patients paying nothing for care.....	30.1	14.8	45.8	35.7	3.7	100%
Patients not classified.....	7.2	0.4	34.4	65.2	0.0	100%
	100%					
Percentage of total admis- sions.....		37.9	44.3	15.6	2.1	100%
(excepting patients not classified as to compen- sation)						

TABLE V—Continued

PERCENTAGE OF CASES, CLASSIFIED ACCORDING TO COMPENSATION,
FOR CARE, ADMITTED THROUGH VARIOUS SOURCES TO
THREE LARGE GENERAL HOSPITALS

Patients Admitted to Hospital No. II, Classified According to Compensation for
Care, and Source of Reference

	Percentage of total admissions	Percentage referred by staff physicians	Percentage referred by non-staff physicians	Percentage referred by charitable agencies	Percentage not classified	
Patients paying full cost of care.....	27.9	67.5	32.5	0.0	0.0	100%
Patients paying part of cost of care.....	40.9	68.0	30.9	1.1	0.0	100%
Patients paying nothing for care.....	15.5	47.7	29.2	20.0	3.1	100%
Patients not classified.....	15.7	77.3	22.7	0.0	0.0	100%
	100%					
Percentage of total admis- sions..... (excepting patients not classified as to compen- sation)		59.0	35.5	4.2	1.3	100%

Patients Admitted to Hospital No. III, Classified According to Compensation for
Care, and Source of Reference

	Percentage of total admissions	Percentage referred by staff physicians	Percentage referred by non-staff physicians	Percentage referred by charitable agencies	Percentage not classified	
Patients paying full cost of care.....	30.5	56.4	43.6	0.0	0.0	100%
Patients paying part of cost of care.....	49.3	50.0	50.0	0.0	0.0	100%
Patients paying nothing for care.....	20.2	73.5	26.5	0.0	0.0	100%
Patients not classified.....	0.0	0.0	0.0	0.0	0.0	0.0
	100%					
Percentage of total admis- sions..... (excepting patients not classified as to compen- sation)		68.9	31.1	0.0	0.0	

TABLE VI

FINANCES OF HOSPITALS IN CLEVELAND HOSPITAL COUNCIL, 1919

Municipal

	Total Expense for Hospital	Total Earnings from Operation	Percentage Ex- penses are of Tot Earnings
Cleveland City Hospital.....	\$428,636.77		
Warrensville Tuberculosis Sanatorium.....	197,020.15		
Total Municipal.....	\$625,656.92		

Non-Municipal

*Babies' Dispensary.....	67,305	\$ 7,000	10.4%
*Cleveland Maternity.....	90,435	58,802	65.0
*Fairview Park.....	85,000	65,000	76.5
†Glenville.....			
*Grace.....	33,000	33,000	100.0
*Huron Road.....	117,600	83,800	71.3
*Lakeside.....	480,000	264,000	55.0
*Lakewood.....	58,000	52,000	89.7
†Lutheran.....			
†Mount Sinai.....	332,000	200,000	60.4
*Provident.....	14,000	13,000	92.9
*Rainbow.....	63,445	12,910	20.4
*St. Alexis.....	108,800	70,000	64.3
*St. Ann's.....	107,125	84,888	79.2
*St. Clair.....	36,975	28,390	76.7
*St. John's.....	169,342	120,200	70.9
*St. Luke's.....	207,120	176,820	85.4
*St. Vincent's.....	249,350	204,800	82.1
*Woman's.....	50,083	39,600	79.2
Total Non-Municipal.....	\$2,269,580.00		
Grand Total.....	\$2,895,236.92	\$1,514,210	

Summary for Non-Municipal Hospitals (so far as calculable)

Subtotal, Expense for Hospitals.....	\$1,927,993.00
Subtotal, Earnings from Operation.....	1,296,214.00
Bed Days Care, 1919.....	439,700
Average Cost per Day of Care.....	\$4.39
Average Earnings per Day of Care.....	\$2.95
Percentage of Average Cost per Day of Care Earned from Operation.....	67.2

*Budget for these institutions covers the year from October 1, 1919, to September 30, 1920.
†Budget for this institution covers the year from January 1, 1920, to December 31, 1920.
‡In order to estimate the average cost and average earnings per day of care for non-municipal hospitals, it is necessary to omit the following hospitals from the calculation: Glenville and Lutheran, as at the time of preparing the table, the total cost and total earnings of these institutions for 1919 could not be ascertained; and also Rainbow, St. Ann's, and St. John's, as at the time of preparing the table, the number of bed days care for the year 1919 could not be ascertained. The figures in the summary therefore do not make a total as large as in the non-municipal group in the table.

TABLE VII
SUMMARY OF CONVALESCENT CASES

Home Environment	Charity		City		Lakeside		Mt. Sinai	
	Cases.	Per ct.	Cases.	Per ct.	Cases.	Per ct.	Cases	Per ct.
and Adequate.....	15	30.0	5	7.0	4	7.0	1	4.5
with minor adjustments.....	21	42.0	19	26.8	21	36.8	10	45.5
but remediable.....	6	12.0	21	29.6	14	24.6	7	31.8
and not remediable.....	6	12.0	20	28.2	16	28.1	2	9.1
needing further hospital care....	2	4.0	6	8.4	2	3.5	2	9.1
	50	100.0	71	100.0	57	100.0	22	100.0
Cases with Home Environment					Total cases	Total Per ct.		
and Adequate.....					25	12.5		
with minor adjustments.....					71	35.5		
but remediable.....					48	24.0		
and not remediable.....					44	22.0		
needing further hospital care.....					12	6.0		
					200	100.0		

TABLE VIII
PATIENTS REMAINING IN HOSPITAL OVER TWO MONTHS

HOSPITAL	Number of patients on Survey census days, averaged	Number of patients remaining over two months on census days, averaged	Percentage of patients remaining over two months on census days, averaged
City.....	549.5	162.5	29.6%
Maternity.....	43.0	0.0	0.0
Black.....	57.5	2.5	4.3
.....	51.0	1.0	2.0
.....	33.0	2.0	0.6
.....	73.0	6.5	8.9
.....	215.5	26.0	12.1
.....	36.0	3.0	8.3
.....	46.5	0.5	0.1
.....	160.0	8.0	5.0
.....	19.0*	0.0	0.0
.....	244.5	22.5	9.2
.....	51.5	0.5	0.9
.....	14.5	1.0	6.9
.....	137.0	9.5	6.9
.....	132.5	4.5	3.4
.....	210.0	15.0	7.1
.....	43.0	0.0	0.0
.....	2,117.0	265.0	7.9

on was received from Provident Hospital for the first Survey census day only.



TABLE IX.

PROPOSED FORM FOR SHOWING
HOSPITAL AND DISPENSARY SERVICE OF CLEVELAND
As Rendered by the Members of the Cleveland Hospital Council During 19.....

	Name of Hospital	Name of Hospital	Total for Cleveland Hospital Council
Hospital— Number of Beds Total Hospital Days Care Percentage of Possible Days Care Classes of Patients Pay Patients Number Days Care Part-pay Patients Number Days Care Free Patients Number Days Care			

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PART ELEVEN

**Cleveland Hospital and
Health Survey**

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PART ELEVEN

**Cleveland Hospital and
Health Survey**

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by
THE CLEVELAND HOSPITAL COUNCIL
Cleveland, Ohio

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Preface

The Hospital and Health Survey of Cleveland was made at the request of the Cleveland Hospital Council.

The Survey Committee appointed to be directly responsible for the work and through whose hands this report has been received for publication consisted of the following:

MALCOLM L. McBRIDE, *Chairman;*

MRS. ALFRED A. BREWSTER,

THOMAS COUGHLIN,

RICHARD F. GRANT,

SAMUEL H. HALLE,

OTTO MILLER,

DR. H. L. ROCKWOOD,

HOWELL WRIGHT, *Secretary*

The staff responsible for the work were:

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and the following collaborators:

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JOSEPHINE GOLDMARK, B. A., *Director of the Nursing Survey;*

WADE WRIGHT, M. D., *Director of the Industrial Hygiene Survey;*

DONALD B. ARMSTRONG, M. D., *Director of Tuberculosis Survey;*

S. JOSEPHINE BAKER, M. D., D. P. H., *Director of the Infant and Maternity Survey;*

T. W. SALMON, M. D., *Director of the Mental Hygiene Survey;*

W. F. SNOW, M. D., *Director of the Venereal Disease Survey;*

LOUIS I. DUBLIN, Ph. D., *Director of the Vital Statistics Survey.*

The expenses of the Survey and of the publication of the report have been met by appropriations received from the Community Chest, through the Welfare Federation, of which the Hospital Council is a member.

The report as a whole, or by sections, can be obtained from the Cleveland Hospital Council. A list of the parts will be found in the back of this volume, together with prices.

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Method of Making a Community Diagnosis

By HAVEN EMERSON, M. D., AND GERTRUDE E. STURGES, M. D.

INTRODUCTION: WHY A SURVEY IS NECESSARY

WHAT is a survey, and why does Cleveland or any other city need the luxury of a diagnosis? A diagnosis implies the presence of ill health. Is Cleveland sick? Even as the careful and thrifty owner has his car overhauled to prevent delay upon the road or accident under strain, and as a young husband looks far into the future and insures his life, so a city may well indulge in community insurance by a periodical searching for weak points in its organization, loose bolts, missing parts, proof of wear and tear, need of replacement and reinforcement of its structure.

While all the world is clamoring for production, it is worthy of great praise if a community should determine that, in one place at least, the producer shall rank ahead of the produce in their thoughts and plans.

Property will always have its protectors and promoters. It is persons who are chiefly neglected, and for these the community health diagnosis makes thought. How may their sickness be prevented, their lives made longer and happier and if sickness overtakes them, how may skill and gentleness be put quickly at their service?

To survey is to view with attention as from a height—to prospect, to examine, and in so doing to make a review and retrospect, to use history and present experience as a basis for programs for the future to insure progress.

The community physician should detect the presence of all factors affecting health and formulate all practical and economical measures to decrease disease and increase comfort.

The public, as investors in the Community Fund, are stockholders in the various institutions supported by this fund, and as stockholders, are entitled to a statement of results—as to the per capita costs as well as the quality and quantity of the output. The contributing public and more particularly the boards of trustees of the various institutions, have a definite responsibility also in seeing that the funds which are provided are made to serve the best interests of the community. They should make sure that the highest degree of professional service is rendered through the institutions for which they are responsible and that the same principles of organization and efficiency are carried out as in up-to-date business enterprises. To this end it is essential that both the character of professional service and the type of business administration receive the thorough investigation of experts from time to time.

It is also pertinent for the investors to know whether there is any overlapping of effort or duplication of function by existing institutions that could

be obviated by more clearly defined policies or by a division of the territory to be covered by each institution. What preventive or curative needs are not being provided for adequately: *i e.*, measured by the estimated service required for prenatal care, for dispensary service, for hospitalization, etc., what failures to meet the need are apparent? What services are not being rendered at all? In an extensive view of all the city's activities for prevention and treatment of disease, for education of physicians and members of the allied professions, what distinct gaps exist in the service? Is there an understanding of the precise problems to be solved and of the ways and means by which they may be solved? Are all modern information and experience in the prevention as well as the treatment of sickness, sufficiently understood by each agency serving the public? Until every doctor, nurse and health visitor working among the sick is aware of the resources and application of preventive medicine to health protection, no possible increase in hospitalization of the sick will meet the needs of the city. Each case of sickness presents a problem of prevention as well as of relief, of education as well as of treatment, of the family and the home as well as of the individual patient. And, finally, is there adequate provision made for coordinating the activities of the private health agencies to the end that they may provide the maximum service with the minimum of effort and of overhead expense?

PRELIMINARY STEPS

With some of the problems in mind to be answered by the community diagnostician, what are the preliminary steps to be taken?

REALIZATION OF THE NEED

First the patient must realize that he needs the services of a physician and must be prepared to render him every assistance. Without not only the patient's consent but his eager and willing assistance, no physician can get all the facts needed before prescribing. A community differs in this respect chiefly in quantity, not in elements for diagnosis, from the individual patient.

COST TO BE CONSIDERED

Sufficient financial support must be assured to "pay the doctor's bill." In Cleveland adequate provision for financing the Survey was made from the Community Fund, at the request of the Cleveland Hospital Council through the medium of the Welfare Federation. A sum of \$53,000 was appropriated for this purpose of which \$52,668.98 was spent.* It is interesting to note in this connection that service, conservatively estimated to be worth over \$10,000, has been given to the Cleveland Survey by cooperating national and local organizations.

THE COMMITTEE IN CHARGE

The organization or committee under whose auspices the community study is to be conducted is another matter for preliminary consideration. In

*This amount was estimated at the time of going to press.

order that every institution may feel itself an integral part of the group conducting the Survey, the committee should be as representative as possible and, that good feeling may be assured, men and women known to be broad in their judgments should be chosen.

In Cleveland the Survey has been conducted under the direct supervision of a special committee of the Hospital Council, consisting of public-spirited business men, a woman representing the nursing interests, the Commissioner of Health and the secretary of the Hospital Council. The Hospital Council itself is a cooperative organization consisting of representatives of the boards of trustees and superintendents of the public and private hospitals in the city. The committee must be able, as this one was, to open all the doors of the city. By the position, character, professional, business and social standing of its members, it must be able to give access for the surveyors to all important public and private groups who can give information or spread it. The editorial offices of the daily papers, the offices of city government, the clubs, churches, professional, business and social groups must be readily accessible and hospitable to the inquiries that lead into the intimacies of community history, and willing to take trouble to see that needs and recommendations are frankly discussed and acknowledged.

THE GROUP OF DIAGNOSTICIANS

Choosing the doctor and his colleagues is the first problem with which the committee is confronted. The group of diagnosticians should possess not only knowledge of the field to be studied, but wide experience with conditions in other cities, in order that they may have a background for gauging local problems. Impartiality will generally be better assured by selecting the entire Survey staff from outside the city.

The Cleveland Hospital and Health Survey has been particularly fortunate in securing the cooperation of many national agencies which, because of the wealth of their experience, are in an ideal position to survey any locality.

SCOPE

The scope of a survey may be either intensive or extensive; either an analysis of one phase or agency of health service or a general health survey; *i. e.*, the examination of a single part of the body, one of the special senses or a general medical examination.

HISTORICAL

It is interesting in this connection to study briefly the range of previous surveys. A study of available literature at the Russell Sage and medical libraries brought out the fact that surveys of health administration and allied subjects are numerous. (See bibliography of surveys). These are the case histories of community patients. Eighty such surveys have been made in thirty different states (several covering more than one state) and also in

two foreign countries. New York, Illinois, Ohio, Pennsylvania and Minnesota ranked in that order in the number of public health studies that had been made upon various of their communities. These investigations have been conducted chiefly by the United States Public Health Service, by state or local health departments, by the New York or local bureaus of municipal research, by the Russell Sage Foundation and by local Chambers of Commerce.

Mental hygiene was the subject next in order of attractiveness to the surveying mind. Results of sixty-three studies of this subject were found. Many of these have been made by the National Committee for Mental Hygiene and several by state or local charitable organizations.

Search brought to light thirty-eight infant mortality and child health studies. The largest number of these had been prepared by the United States Children's Bureau, although the Russell Sage Foundation and the National Child Labor Committee had each conducted several studies of this type.

Thirty-four social surveys were found, made by a wide variety of groups. This number includes only the most important contributions along this line. The list could be greatly increased, no doubt, by the addition of all the local social studies that have been made, reports of which were not sought for particularly in this review of the literature.

There were records of twenty-nine industrial hygiene investigations, half of which were made in New York City, six by the New York City Department of Health. Many studies of industrial hazards have also been made by the United States Public Health Service and by the United States Department of Labor.

There were records of twenty-five tuberculosis surveys, many of them made under the auspices of the national or local anti-tuberculosis societies. The effect of industry on the incidence of tuberculosis is the subject of many of these investigations. The influence of housing and economic conditions, nationality and race were some other main points covered in these studies.

The amount and character of sickness in various communities have been the object of twelve investigations—most of them conducted by the Metropolitan Life Insurance Company.

The most comprehensive surveys that have been made are: the Pittsburgh Survey, the record of which is published in six volumes, embracing the following among its major topics—civic improvements, industrial hygiene, housing, schools, playgrounds, libraries, social agencies—and The Springfield, Illinois, Survey which includes studies of schools, mental hygiene, recreation, housing, charities, industrial conditions, city and county administration, public health and the correctional system.

One hundred and eighty-four authors were responsible for the two hundred and eighty-one investigations above summarized. There are many

authors of several surveys—L. K. Frankel and L. I. Dublin, studies of sickness incidence; C.-E. A. Winslow, Carrol Fox and Franz Schneider, Jr., health administration and sanitation; Thomas W. Salmon, T. H. Haines, E. O. Lumberg, W. L. Treadway and S. D. Wilgus, studies in the field of mental hygiene; J. W. Schereschewsky and L. I. Hanes, surveys of industrial hygiene; Shelby M. Harrison, social surveys; W. H. Slingerland, studies in prevention of infant mortality.

The report of a study made by the Northeastern Hospital Association, of the hospital facilities in an area of about 4,000 square miles with a population of 2,500,000 in the North of England, comes nearer to including many of the points upon which the Cleveland Hospital Council wished information than any survey reported in the United States. This English study which was summarized in the *Edinburgh Medical Journal* in December, 1919, did not, however, enter the field of health administration or deal with the social and medical problems of a large industrial city such as Cleveland. This study is well worth reading by hospital associations in this country, especially such as have to do with rural and small town community services for the sick.

FACTORS DETERMINING SCOPE

The scope of a survey will be decided by many factors, particularly by the extent of previous surveys. Cleveland, for instance, had adequate current information on recreation, education and housing and it was unnecessary to elaborate upon these accessory features of a health survey. Sickness surveys had been made in other cities by the Metropolitan Life Insurance Company, the results of which were applicable to Cleveland, and so it was not thought necessary to collect duplicate data in this field. The scope of a survey will also be determined to some extent by the aims of the group conducting it, by the special problems that are immediately facing the community, and by the financial resources of the sponsors of the investigation.

In general, it may be said that, since many separate agencies both private and public are involved in protecting or serving the city's health, all must be coordinated in an attack upon disease. As many of them as possible must be analyzed and described in order to arrive at a community picture. The general scope of the Cleveland Hospital and Health Survey, as outlined in the letter of authorization, included:

1. Study of education in medicine and in the allied professions.
2. Study of the facilities for the treatment of the sick.
3. Study of measures for the prevention of disease.

The scope of the individual parts of the survey will be decided again by the special community problems involved, as well as by the nature of the institution or service. As the chief problems brought to the attention of

the present survey lay along the line of hospital and dispensary treatment these services received a large share of attention.

Detailed plans of the ground to be covered and the character of the report should, as far as possible, be worked out before the survey is far advanced—for the sake of economy in time and money.

AIMS AND METHODS OF DIAGNOSIS AND TREATMENT

The aim of the community physician should be not only to arrive at a diagnosis and prescribe a course of treatment but to explain thoroughly both diagnosis and treatment to the patient, and where possible to assure avoidance of repetition of the difficulty. In general, the Cleveland survey has been undertaken in a spirit of practical application rather than as a technical, statistical or research problem. That is, every effort was made to explain all criticisms and recommendations to the governing bodies and executives of each institution concerned, as by personal conference with these groups the community physician had his best opportunity for influencing the family of the patient to assist in carrying out the treatment prescribed. Often the executives themselves were able to point out deficiencies that were not apparent to our investigators. On the other hand, they frequently made situations clear that might, without interpretation, have given rise to undeserved criticism. Besides numerous more or less informal and incomplete conferences on details of the work during the year, a week was devoted to formal conferences with groups of trustees of hospitals, to present and discuss the survey findings after they had been formulated and measured. The preliminary recommendations and constructive criticisms were so well received that many recommendations of the survey had already been put into effect before the findings were published.

The diagnostic procedures employed by the community physician are similar to those used by the regular medical practitioner, i. e., history taking, physical examination, laboratory analysis.

EDUCATION OF THE PATIENT

It will be necessary to make use of educational methods, first, last and always, to win the confidence of the patient's family and friends. The methods employed in community education are those of publicity, i. e., newspaper and magazine articles, circular letters and addresses and lectures by members of the staff. It is essential that the public recognize the purpose and scope of the investigation and by personal contact with the diagnostic group develop confidence in those who are conducting it, so that when the findings are ready, an educated and receptive public opinion will have been prepared.

The Cleveland Hospital and Health Survey was fortunate in obtaining the services of the publicity experts on the staff of the Welfare Federation, who have been most useful in making contacts with the public through the local press.

During the first month, the Survey sent form letters to various groups (medical practitioners, social agencies, hospitals, labor unions, industries, men's and women's clubs, and fraternal organizations), to obtain their interest and cooperation. In some cases, specific information was asked for so that the letters served two purposes. (For two typical letters, one to physicians and one to social agencies, see Appendix 1 and 2.)

During the course of the Survey members of the staff addressed over sixty meetings of various sizes, including the Academy of Medicine, the Men's and Women's City Clubs, the Chamber of Commerce, church congregations and groups of physicians, nurses and dentists.

COMMUNITY HISTORY TAKING

In order that the community diagnosis may be based on all the facts, and present problems understood in the light of the past, the personal history of the patient must be secured. Facts as to the history of public health in Cleveland were obtained by conferences with those who have been interested in this work for many years.

A conception of the special problems of the community which relate to public health, or a knowledge of the history of the present illness, must be formulated from rather intangible material obtained in personal conferences, or questionnaires which ask specifically for criticisms of institutions which are not serving the public in a satisfactory manner. The information so obtained, although inconclusive, will often serve to suggest avenues of study that might otherwise be overlooked. Also an institution's relations with the public are an important index of the effectiveness of its service. In analyzing such information it is important to differentiate criticism stimulated by personal animosity, from that which is confirmed by similar observations from other and varied sources, pointing towards a real undermining of health or at least a defective structure or function.

QUANTITATIVE ESTIMATE OF NEEDS

It is necessary to gauge the extent as well as the quality of service needed along various lines. That is, an estimate must be made, based on local figures compared with those from other cities, of the number of women who need prenatal care, out-patient delivery or institutional confinement, the number of children of pre-school age who need free medical supervision, the number of tuberculous who should be under observation at health centers, the number and character of those who need dispensary service, the proper proportion of hospital beds to the population, and so forth. It is obvious that no final answers to these questions can be made, but in order to decide the need for extension of the various preventive and treatment facilities the extent of the problem must be measured and recorded.

LAWS AND LAW ENFORCEMENT

Study of the adequacy of state and local laws relating to the professions and dealing with public health agencies, and the efficacy of their enforcement, is essential. In connection with the mental hygiene and social hygiene studies investigations were made also of the provisions for detention

of individuals and their treatment in the courts. Does the sanitary code of the city contain all modern provisions for health protection? Are the laws adequate which regulate conditions in industry affecting health? Comparing the existing laws with model laws in other states and cities, it will be possible to recommend additions to or changes in the existing statutes.

Some of the questions of law enforcement that are fundamental to health protection follow: Are physicians and midwives practising without a license; do they report births, deaths, contagious and infectious disease as the law requires; are housing and sanitary regulations upheld; are children allowed to work on streets and in factories in violation of the Child Labor laws; is the ordinance against dense smoke commonly observed?

A birth registration check was made at the Division of Health covering about 800 children under two years of age, who had been born in Cleveland, to see if their births had been recorded. The form on which the information for checking was collected will be found in the Appendix (3).

COORDINATION AND FUNCTIONAL CONTROL

The actual analysis of the organization and accomplishments of the different institutions may well be compared to the physical examination of the patient. It is quite obvious that it is impossible to differentiate sharply the various methods of procedure, as they often overlap or are combined. In studying any institution attention must first be given to its type of organization and functional control (the nervous system). Of whom is the board of trustees composed? Do the trustees take a personal interest in the details of hospital administration? Do they see that the same principles of efficiency on which they pride themselves in their private enterprises are carried out in the public institutions under their supervision? Is the executive authority of the institution divided?

The organization of the medical staffs of hospitals and dispensaries also was studied in detail. How is the medical staff nominated? How are the members appointed? How often are staff meetings held and what is the purpose of these meetings? Has the staff an executive committee? Is there an auxiliary staff? These and similar questions were put, and special recommendations as to hospital organization were made when the answers were obtained.

The administrative procedure of private philanthropic institutions is very often their weakest spot. Methods of efficiency and practical economy are often lost sight of in well meaning attempts to render service.

Are purchases made in large quantities? Are storage facilities ample? Are cash discounts taken? Are accounting and bookkeeping methods standardized? Are all reasonable time-saving devices in use? These are

some of the questions which interest the investigator. Questionnaires used in

1. Study of organization and administration of private and public health nursing agencies

and

2. Study of hospital administration

are reproduced in the Appendix (4 and 5).

THE ASSOCIATED HEALTH PROFESSIONS AND THEIR TRAINING

The brain needs here as in the case of the individual patient the most delicate and tactful approach, and the psychology of professional groups must be studied, as well as the crude facts of their numbers and accomplishments. As the entire undertaking of preventive medicine and all the care of the sick depend upon the quality of licensed practitioners of medicine, nursing, dentistry and pharmacy, full knowledge of the limitations in the education of students both before and after graduation must be sought and described. If one element rather than another in the examination of the community has been incomplete, it is the study of professional training of physicians, dentists and pharmacists. For the nurses the information is quite complete.

QUANTITATIVE DETERMINATIONS OF FUNCTIONS

It is necessary to ascertain the number and the size of the different types of institutions and to decide whether the available service is sufficient to meet the actual and potential demand. Are there enough hospital beds to care for the community sick? The answer to this question was sought in various ways. The hospitals were asked to keep for two months a record of the cases to which they refused admission. Printed pads were furnished the hospitals on which to record this information (Appendix 6). The results of this investigation were tabulated as follows:

Type of service—medical, surgical, etc.

Economic status of patient—pay, part-pay, or free.

By whom request for hospitalization was made—self, agency, doctor or family.

Whether or not patient was placed on waiting list.

The public health agencies were asked to furnish statistics as to the number of patients under their care during a certain month, who were properly hospital cases. Social agencies and district physicians were asked whether they were able to obtain hospital care for their patients promptly. Questionnaires, sent to physicians, inquired whether they found it difficult to obtain hospitalization and if so for what class of patients. The number of available beds was compared with the estimated population to be served, and comparison was made also with the ratio of hospital beds to population

in other cities. The number of existing beds for various special services, e. g., orthopedics, tuberculosis and maternity was ascertained and a comparison made with the estimated need in Cleveland and with the number of beds available for similar services elsewhere.

A special investigation to determine the need, if any, for an institution to care for convalescents, was made by visiting the homes of 200 patients recently discharged from four leading hospitals to see if conditions were proper for their prompt convalescence.

Is there enough social service work provided by hospitals and dispensaries to make the medical service most effective? Is the ambulance service ample so that the location of hospitals in the outskirts of the city is feasible? Are there enough dispensaries and are they properly located? Are the special dispensary services, *i. e.*, prenatal, prophylactic, babies', orthopedic, industrial, tuberculosis, venereal, and so forth, adequate? Is sufficient medical service provided by child-caring institutions, by schools and by industrial plants? Are there enough diagnostic laboratory facilities, both public and private?

The method of investigation to determine the answers to these questions was in each case somewhat similar to that described above for determining the needs in hospitalization. That is, a study was made of the number, location and amount of service of the existing institutions. The questionnaire that was used in determining the amount and character of medical service in industry is given in the Appendix (7). All reasonable avenues of inquiry were followed to learn whether the local need was being adequately met. The amount of service was compared with the estimated number of people to be cared for and with the extent of similar service provided by cities of approximately the same size. Hospital superintendents, physicians, representatives of nursing and social agencies were asked by questionnaire and in conference, whether their needs for ambulance transportation were being promptly and satisfactorily met. Inquiries were sent to other cities for facts as to the number of ambulances provided by the city hospital, by the police and by private hospitals; as to the number of dental chairs for free service and the hours they were in use; as to the number of hours of medical service provided weekly in free clinics for the treatment of tuberculosis; and so forth. The amount of potential dispensary service and of medical service in schools and industry is obviously determined not by the number of dispensaries but by the number of physicians and nurses and the amount of time devoted by each to this service. The actual amount of service rendered is shown by such records as the number of patients cared for annually and the number of different treatments given. Again the value of the service is not measured by the amount but rather by its character which is a less tangible factor to analyze.

QUALITY OF FUNCTION

The output of a hospital or dispensary cannot be measured by exact standards, but there are certain recognized methods by which medical and

nursing procedure may be analyzed as to quality. These are: a study of personnel and equipment, an analysis of the records of patients, a personal observation of technic and a statistical analysis of results.

Upon the character as well as the training and experience of the personnel in charge of any service depends the quality of the product. Personality is, of course, an intangible factor to evaluate, but the training and experience of the workers are or should be a matter of record, available to the investigator. In the nursing survey, and the study of the health department especially, particular attention was given to these factors (Appendix 8). The employment of trained persons is essential to assure standard service in the professional lines. Inquiry was therefore made as to whether anaesthetist, dietitian and laboratory technicians were employed in hospitals.

In some instances the character of service must depend largely upon the adequacy of equipment. Laboratory and hospital nursing technic, for instance, require certain minimum equipment to produce a high grade of service. In measuring these services observation was made to see if standard equipment was available. (Appendix 9.)

In order to determine whether the physical defects of children in institutions were being detected and corrected, several hundred children, some taken from each institution, received both physical examinations and mental tests. For the form used for recording physical examinations see Appendix 10.

As the records of patients constitute the only means by which an objective presentation of medical work can be accomplished, the analysis of a considerable number of the records of an institution gives a fairly accurate picture of the clinical procedure obtaining there. Therefore, in evaluating the quality of various professional services, the study of records received considerable attention. Fifty records from each of twenty hospitals were analyzed to find whether they contained the following items: personal history, physical examination, working diagnosis, laboratory findings, operation or treatment, progress notes, final diagnosis and condition on discharge. One hundred records were studied in each of the dispensaries with the above points in mind and also to ascertain the nationality of the patients, the number of revisits, and so forth. Several hundred health records of school children were analyzed to find the proportion of corrections that had been made to the number of defects found, and the average number of nurses' home visits and parents' consultations on each case. Health center records were analyzed to find the average number of patients' visits to the clinic and of nursing visits to the home; the records of nurses' time were studied to find the relative proportion spent in clerical and other duties. Prenatal records were analyzed to find the month of pregnancy during which the patient was brought under care, as well as the number of patients' visits to the dispensary, and of nurses' visits to the home. A comparative analysis of the records of the school census, of the work certificate office and of the state industrial commission to learn the number of children employed in industry, was made. Data were secured from a census of 100 newsboys

attending a down-town school as to their age, health, mental capacity—as stated by their teachers—and the number of hours they worked at night. An investigation was made of the content of industrial health records and the method of compiling and analyzing the data recorded. The method of filing and indexing hospital and dispensary records was also investigated, and inquiry made as to the means of assuring compliance with the hospital rules for the completion of histories.

Extensive personal observation was made of nursing service both in hospitals, dispensaries and in public health nursing districts, and of the work of school medical inspectors.

In the Division of Health also the method of evaluating the quality of service by personal observations was found useful. Members of the Survey staff accompanied sanitary and dairy inspectors and collectors of laboratory samples in their trips, and made observation of routine laboratory examinations and other functions at the central office.

RESOURCES FOR PREVENTION

In studying the adequacy of health protection and the prevention of disease the following questions must be faced. Are sanitary conditions in child-caring institutions, schools and industrial establishments such that the health of children and employes is safeguarded? Is the city water supply from a safe source and protected from contamination? Are sewage and garbage disposal satisfactory? Does the method of control of communicable diseases minimize the danger of their spread? Does the inspection of food products and drugs protect the public against adulterated or contaminated products? Are nuisances controlled and the contamination of the air prevented? Is the community being constantly educated in the methods of health protection, both public and private?

The methods of ventilation and cleaning, of adjustment of blackboards and seats, the general construction, lighting, cubic air capacity and toilets of public school buildings were investigated. The temperature was read in a series of rooms and the force of the drinking fountains in many buildings was noted by the investigator. Investigation of working conditions was made in several hundred industrial establishments. (For the questionnaire used in studying working conditions for women, see Appendix 11.)

A study of the amount and character of health education was made for questionnaire, see Appendix 12.)

CHECKING UP THE FACTS FOR DIAGNOSIS

Statistical study may well be compared with the laboratory method of diagnosis—the methods of investigation are more exact and the findings more definite. If the processes are accurate the results permit certain deductions to be drawn with precision.

Some of the statistical studies made by the Survey were as follows: A study of data regarding age and sex distribution and nationality of the population; a study of general mortality and mortality from the chief causes for a period of years; a comparison of mortality and morbidity rates, as well as hospital and dispensary attendance, by health districts; a study of tuberculosis mortality by age, sex, form and occupation; a comparison of the death rate under one month, the maternal death rate and the stillbirth rate of a series of cases under prenatal care with that for the city as a whole; a study of the records of The Industrial Commission of Ohio relating to accident frequency and accident severity rates in industry and to the employment of women and children in industry; the preparation of pin maps locating the various types and sizes of industrial establishments; a study of milk consumption in connection with the tuberculosis survey (for the form used in collecting the material, see Appendix 13). The records of 1,000 families were tabulated as to types of illness, amount of milk consumed, the kind of milk purchased and how milk is cared for.

In order to obtain statistical information, a census was taken on December 3, 1919, and again on January 15, 1920, of the patients in the hospitals of the Cleveland Hospital Council and in four other institutions which were willing to furnish the necessary information. These results were averaged and tabulated as follows: (Census blank, Appendix 14).

Percentage of beds in use.

Type of service, i. e., medical, surgical, etc.

Length of stay of patients in hospital.

Location of residence of patients.

Economic status of patients.

Percentage of cases admitted by staff and non-staff physicians.

Percentage of free, part-pay and pay cases admitted by staff and non-staff physicians.

Age of patients.

Nativity of patients.

Economic status of patients according to nativity.

CONCLUSION

TREATMENT AND FOLLOW-UP

When the community diagnosis has been made and, after a consultation of specialists, the method of treatment is outlined, how shall the prescription be prepared, by whom the operation be performed, and who shall be the victim? A detailed report of a survey is of much more than local interest. Communities of comparable size have much the same problems to face as has Cleveland. Study of the results of a survey in one city will often serve to suggest the answer to problems in another community.

It was thought useful to have the Cleveland Survey printed in the present inexpensive form in order that copies might, at small expense, be made available to state and local health departments, to medical and general libraries, to hospitals and nursing organizations, to medical and other practitioners in the allied professions, to public health societies and others.

The final action of the survey staff is to prepare their report for publication. It is left to the patient—the public—to do the rest. The survey will prove of no avail unless the community is ready to carry out the plan proposed. If, as in Cleveland, there is no permanent organization extant to which a follow-up of the community's case may be left, it will be necessary to recommend, as the Cleveland Survey has done, the formation of a cooperative group composed of representatives of all organizations interested in public health, to which—with their other duties—will be left the task of seeing that the community takes its medicine. The proposed Cleveland Public Health Association must provide follow-up and convalescent care for the community patient, the great city of Cleveland!

APPENDIX

FORM LETTERS AND QUESTIONNAIRES

(1.)

November 28, 1919.

Dear Doctor:

We are at your service and we need your counsel and support.

Take a moment to answer the queries below and we can assist your patients through you to better service.

1. Have you found difficulty in obtaining hospital care for your own patients?

2. If so, for what kinds of patients, *i. e.*:

Surgical or medical.

Pediatric or orthopedic.

Neurological or mental.

Obstetrical or gynecological.

3. What solution have you to suggest for remedying the hospital situation from the point of view of the patients or of the medical profession?

4. During the past 12 months, approximately how many patients with venereal disease have you had, under your private care (syphilis—gonorrhea—chancroid)?

5. How many of these patients discontinued the treatment you advised without your consent, and why?

These reports will be kept confidential and no names quoted in reporting the totals received in the answers.

Come in and watch the process of taking the family and personal history of Cleveland, making the physical examination of the city and trying out laboratory methods for a Community Diagnosis. It is your community and the treatment will be in your hands in any event.

Give us the "once-over". It does us good to be criticized.

Yours cordially,

Director.

(2.)

November 20, 1919.

Dear Sir:

The Hospital and Health Survey wants to look at the medical and health service of Cleveland from the outside as well as the inside. We need very much to have the information and opinion of the Social Agencies. As you call upon the hospitals, dispensaries and Health Department for medical aid in behalf of your people, you can therefore give us many practical points which are most important.

On a separate sheet we have put a few questions or topics. We should like very much to have your answers or comments on any or all of these.

In case you prefer to go over the matter personally with a member of the staff of the Survey, will you kindly call us so we can arrange for a conference?

Any information given by you as to names, quotations, etc., will be treated as confidential by the Survey.

Very truly yours,

GS-JHS

Assistant Director.

1. Patients refused admission to hospital. Do you find many patients in whom you are interested who cannot be admitted to hospitals? Among what classes are these the more frequent? We would be glad to have comments, reasons, etc., for refusal or other conditions, which might help to bring out the nature or extent of the shortage of hospital beds if such exists.

2. Have you felt there is inadequate dispensary service? If so, along what lines of work or in what parts of the city?

3. Do your agents find it difficult to secure answers to inquiries for medical information concerning hospital and dispensary cases in which you are interested? Are the difficulties uniform among different hospitals or dispensaries?

4. The work of the City District Doctors. Are they prompt in answering calls? Do they give continuous care on your cases? Can you secure medical information from them when needed? Do you distinguish between the type of patient you refer to City Physicians and to the other medical relief agencies, such as dispensaries and private doctors, as to whether they are ambulatory or bed ridden, contagious or non-contagious, etc.? Do you think that patients who can afford to pay anything for medical care should be referred to City Physicians?

5. What patients feel or say about hospitals. Any "stories" or examples of experiences that patients in hospitals have had which would serve to bring out the real difficulties, needs or deficiencies, would be welcome.

6. What policy exists between the Social Service Department of the hospitals and your agency with regard to furnishing material relief? What points do the Social Service Departments turn over to your agency for general work with the family or how far do they carry this themselves or do you both handle this phase of the work at the same time?

(3.)

BIRTH REGISTRATION SURVEY

Fill out only for children under 2 years of age born in Cleveland.

Name of child (Family name).....(Given name).....

Date of birth: Month.....Day.....Year.....

Place of birth (address of residence or institution).

Name and address of attending physician or midwife,

Signed by person making report

(4.)

COMMITTEE FOR PUBLIC HEALTH NURSING EDUCATION
OFFICE REPORT: PRIVATE AGENCIES

A. I. Name of Association.....

Address.....Year founded.....

B. Organization

I. Types of work.

1. ☒ General visiting nursing.

(a) Specify what kinds of work are included.....
.....
.....

(b) What types of sickness are refused or referred to another organization
for nursing care?.....

2. Specialized Services

(a) Infant or child welfare; up to what age?.....
Specify what kinds of work are included.....
.....

(b) Anti-tuberculosis work.....Supervision.....Instruction.....
Placement.....Bedside care.....

(c) Industrial nursing.....

II. 1. Total number of visits made during last fiscal year.....

2. Total number of cases.....

3. Cost of a visit.....

4. Average number of visits per day per nurse.....

5. Number of patients paying:

(a) Full cost.....

(b) Part cost.....

(c) Nothing.....

III. Personnel

1. Board of Managers: Title.....

(a) How many are men?.....

(b) How many are women?.....

(c) How often does the board meet?.....

(d) Does the nurse superintendent meet with the board?.....

2. Nursing Committee

(a) How many members?

(b) How often does it meet?.....

III. Efficiency

- 1. What methods are used to judge efficiency of nurses?.....
- 2. (a) Are efficiency records kept?.....(b) Has the nurse access to her record?.....
(c) If not, how is the nurse informed of her standard?.....

IV. Salaries

- 1. Staff nurses: Minimum.....Maximum.....Rate of increase.....
- 2. Supervisors: “ “ “ “ “
- 3. What is the length of vacation on salary?.....
- 4. Are the following furnished in addition to salary?:
(a) Uniforms.....(b) Board..... (c) Lodging.....
(d) Other Allowance.....

V. Hours of work

- 1. What are the hours of work daily?.....(a) Sunday?
- 2. Is time spent in record keeping included in working day?.....
- 3. Is there one complete day of rest in seven?.....
- 4. Is there a weekly half-holiday in addition?.....
- 5. Overtime work: average per week per individual during last month.....
- 6. Is night work expected? (a) For what cases?.....
.....(b) Is time off allowed for night work?.....

VI. Recording

- 1. How many hours weekly are spent in recording, (a) by supervisor?.....
(b) by staff nurse?.....
- 2. How many clerical workers (not nurses) are employed?.....

D. What is the superintendent's conception of the function of the Association in regard to the education of

- (a) Patients and families?.....
- (b) Nurses?.....

E. Comment by superintendent on education, training, and personality of staff nurses?

F. Obtain two copies of the following:

- 1. All record forms.
- 2. Practice instructions.
- 3. Efficiency record.
- 4. Annual report for last two years.
- 5. Publicity material published within the last year.

i. Remarks:

Name of Investigator

Date

5.)

URVEY OF ADMINISTRATIVE DEPARTMENTS OF CLEVELAND GENERAL HOSPITALS

FINANCIAL ADMINISTRATION

a) Per capita per diem cost of administration—1918?1919?

Do you charge all expenditures for current repairs, new equipment and betterments to expense account so that it will appear in your per capita per diem cost of maintenance?

Do you charge off annually a percentage for depreciation?

b) Do you discount certain bills for cash?Total earnings from cash discounts for 1919?

c) Have you an income from endowments?

d) What rate charged for private rooms?Ward beds?

e) Do you charge extra for the following?

Blood transfusion?Rate?

Large surgical dressings?Rate?

X-Ray plates and stereoscopic examinations?Rate?

Nurses' board?Rate?

Surgical dressings, such as perineal, abdominal and prostatic pads, plaster bandages, etc.?Rate?

Plaster casts?Rate?

Services of anesthetist?Rate?

All laboratory examinations?Rate?

Fancy foods, such as squabs, broilers, frog legs, etc.?Rate?

First aid services in emergency cases?Rate?

Salvarsan administration?Rate?

Drugs and prescriptions?Rate?

Splints and surgical appliances?Rate?

Ambulance services?Rate?

Meals and cots for relatives and friends of patient?Rate?

f) Do you collect board and room accounts one week in advance?Do you bill patient's responsible relative weekly thereafter?

g) Have you an office clerk, investigator or credit man for investigating financial standing of patients?

- (h) Do you admit county or city patients at regular rates?.....
- (i) Do you use a budget system in estimating your expenses for the ensuing year?
- (j) Do you have an annual accounting by a firm of accountants?.....
- Have you installed a modern bookkeeping system adapted to hospitals?.....
- If a standardized system of hospital bookkeeping and financial reports were recommended, would you endeavor to have same carried out in your hospital?.....
- Have you an accounting system in use in your hospital?.....

PURCHASES AND SUPPLIES

- (a) Are all purchases made by or with the personal approval of the superintendent?.....
- Have you a steward who makes purchases?.....
- Are heads of departments permitted to make purchases?.....
- (b) Have you saved money through the purchasing bureau of the Cleveland Hospital Council?.....
- (c) Do you obtain quotations or ask assistance of the purchasing bureau of the Cleveland Hospital Council when about to make purchases of any size?
- Can you increase the amount of your purchases through the bureau to advantage?
- (d) Have you sufficient store room capacity for
- One year supply of canned goods?.....
- Three to six months of gauze and cotton?.....
- Three to six months soap supply?.....
- Three to six months supply of dry goods?.....
- (e) Do you store fresh eggs or fresh butter in public refrigerator storage house in April or May for use during the period of maximum high prices? (November, December, January).....
- (f) Have you contracts for the purchase of coal?.....Electric lamps?.....
- Milk from producers?.....
- (g) Would you cooperate with the Cleveland Hospital Council and the American Hospital Association in a standardization of hospital supplies?.....

HOSPITAL ECONOMICS, SALVAGING, ETC.

- (a) Have you a house carpenter?.....Steamfitter?.....
- Painter?.....
- (b) Have you a surgical appliance or instrument repair shop?.....
- Do you salvage, wash, and reclaim, gauze and bandages?.....
- Do you bail and sell waste paper?.....
- Grease?.....Garbage?.....Barrels?.....Old Rubber?.....
- Old metal?.....Rags?.....Bottles?.....

- (c) Do you make soft soap from grease?.....From soap chips?.....
- (d) Do you utilize labor-saving devices?.....
- Vacuum cleaner?
- Electric floor scrubber?.....
- Electric dough mixers, meat cutters, etc.?.....
- Dish washing machines?.....
- (e) Do you maintain a sewing room and manufacture part of your dry goods?.....

DEPARTMENTAL EXPENSES

Engineering Department

- (a) Do you manufacture your own electric current?.....
- (b) Is your boiler plant and machinery up-to-date?.....
- (c) Do you maintain a refrigerating plant?.....
- And are your ward and corridor ice boxes refrigerated therefrom?.....
- (d) Do you manufacture ice?.....

Laundry

- (a) Is your laundry machinery in good order and modern in type?.....
- (b) Have you a steam tumbler?.....Steam presses?.....
- (c) Have you a trained laundry man or woman in charge?.....
- (d) Do you manufacture your laundry soap from soap chips or grease and alkali?.....

Ambulance

- (a) Do you maintain a hospital ambulance service?.....
- If not, what ambulance do you utilize?.....
- (b) Do you consider the Cleveland ambulance service satisfactory?
- (c) Should a central ambulance service be managed
- By the municipality?.....
- By private ownership?.....
- By the Cleveland Hospital Council?.....

Dietetic Department

- (a) Have you a dietitian?.....
- (b) Does she arrange all menus for patients, nurses and employes?.....
- (c) Does she have general supervision of all cooking and food service in the hospital?.....
-

Professional and Staff Service

(b) Has the Attending Staff an Executive Committee with authority in professional matters? _____

(d) Do you furnish rubber gloves for your attending surgeons for use on private cases?
 If so, why?

(e) Do you purchase manufactured catgut, or do you prepare your plain and chromic catgut from raw gut?

(f) Has any member of your Attending Staff authority to purchase equipment or supplies? _____

(6.)

APPLICANTS FOR HOSPITAL CARE NOT ADMITTED

Date.....

Sex **Age**

Nature of disease (or diagnosis).....

Address (or location in city).....

Was applicant for Free.....Part Pay.....Pay.....
(Check)

Was request for admission made by Patient's self.....

Family of patient.....

Agency in behalf of patient.....
(Check)

If request by agency, please state name of agency.....

Was applicant put on waiting list.....

Name of organization giving information.....

(7.)

MEDICAL SERVICE IN INDUSTRIAL ESTABLISHMENTS

1. Firm name.....**Date**.....

2. Address.....

Nature of product.....

Total number of employes.....Male.....Female.....Children, 15-18.....

Medical Service

Dispensary.....Location in plant.....No. rooms.....Size.....

Plant hospital.....No. beds.....Personnel.....

Physicians, full time, during service.....Part time.....

Names and addresses.....

Nurses, trained, male, female.....

No on dressings, visiting, other, mixed.....

Type of medical service.....

First aid.....Kits where?.....

Average no. dispensary visits daily.....

Total no. accident cases per month.....Surgical, n. o. s.....Medical.....

Accessibility of disp. Verbal, written permission of foreman.....

Noon visits?.....After working hours.....On company time?.....

Physical examination, required, optional, applicants, employes, periodic, transfers?
.....

Causes and percentage rejections.....

No. handicapped employed.....Own employes?.....

Medical records, day sheet.....

Permanent individual record.....

Daily individual record.....

Special services.....

Dental service.....Limits.....Cost.....

Laboratory.....X-Ray.....

Visiting nursing.....

Absence follow-up.....Sickness.....

Dressing assistants.....Clerks.....

Interpreters.....

Ambulance service, own.....equipment, personnel.....

Hospital for severe cases.....

Service satisfactory?.....Why?.....

Contract?.....Supplementary compensation?.....

Complaints?.....

Do you favor establishment of industrial wards?.....

Of industrial clinics?.....

Care of eye injuries?.....

No. cases tuberculosis yearly.....Disposal.....

Disposal communicable diseases.....

Venereal disease program.....

6. Relations of medical department.

To whom is chief surgeon responsible?.....
To whom are nurses responsible?.....
Relation to employment.....
Relation to safety.....
Relation to other employes' services.....

7. Personal Service Activities

Mutual benefit fund.....Control.....
Self insurance.....Sick benefit.....
Sick absences.....Accident absences.....
Rest rooms.....Equipment.....
Lockers.....Location.....
Lunch room.....Food sold, heated.....
Recreation.....
Education, health, general.....
.....

8. Health hazards of operation.....
.....
.....

9. Labor unions.....
Shop committees.....

10. Cost of medical service.....Salaries.....Equipment.....
Maintenance.....
Does it pay? How?.....

11. Information from.....Position.....

12. Statistical reports.....
Record forms.....
Photographs.....
Blue prints.....

8.)

COMMITTEE ON PUBLIC HEALTH NURSING EDUCATION; INDUSTRIAL NURSING SERIES

PERSONAL HISTORY

- A. 1. Name and Address of Employer.....
.....
- 2 Name of Nurse..... 3. Age..... 4. M. S. W.....
5. Are you registered?..... 6. If so, give state and year.....
7. Name of present position (specify staff nurse, supervisor, head nurse, assistant, etc.)
.....
8. Length of service in present position.....years.....months.....
- B. 1. Did you hold a paid position before beginning nurses' training?.....
(Describe last two positions only)

Nature of Work*	Length of Service	
	Years	Months

*Specify exact position held, e. g., teaching, clerical work; employment in store or factory other than clerical; personal service, such as caring for children, social work, etc.

2. Paid positions held after completing nurses' training—
Have you done private nursing?..... If so, for how long?.....years
.....months.
Positions other than private nursing—

Name of Employer	Place	Nature of Work*	Length of Service	
Association, Company or Individual	City or Town and State		Yrs.	Mos.
(a).....
(b).....
(c).....
(d).....
(e).....
(f).....

*Give name of position and kind of work , e. g., head nurse; operating room; staff nurse; infant welfare work, etc .

C. 1. General Education

NAME	City or Town and State	Year of graduation	If not graduate No. of yrs. attended
Grammar or Parochial School.....
High School.....
College.....
Other Schools Not Nurses' Training Schools.....

2. Hospital Training (Undergraduate):

Name and Address of Nurses' Training School.....
.....

Year of Graduation..... Length of Course.....

Number of Hospital beds at time you graduated.....

Were pupils sent out of hospital to do private nursing?.....

If so, for how long were you thus employed?.....

Did your training include work with the following:

- (a) Men..... (b) Women..... (c) Children.....
- (d) Sick Infants under 2 yrs..... (e) Medical Cases.....
- (f) Surgical Cases..... (g) Obstetrical Cases.....
- (h) Nervous and Mental Cases..... (i) Venereal Diseases.....
- (j) Tuberculosis..... (k) Other Communicable Diseases (specify which).....

Postgraduate Courses:

School or College	City and State	Length of Time Attended	Year	Subjects Studied

ses' organizations of which you are a member:.....
.....
.....

Date.....

(9.)

WARD EQUIPMENT

Service Rooms—

1. Bathroom: (a) Is it clean?..... (b) Adequate facilities?.....
2. Utility Room: Are the following present and adequate?

Slop hopper.....	Instrument sterilizer.....
Utensil sterilizer.....	If not, what is done in usual cases:.....
Bedpan and stool sterilizer.....	.....
If not, what is done in usual cases?.....	In infectious cases?.....
.....
In infectious cases?.....	Gas burner.....
.....	Cans for rubbish.....
Sink.....	Linen hampers.....Chests.....
Bedpan hopper.....	Table.....Shelf.....
Care of infectious linen.....	.....

3. Portable Equipment—Is it adequate?

Basins: Cleaning.....	Thermometers.....
Bathing.....	Tray treatment system.....
Hot water bags.....	.....
Ice caps.....	Provision for medication.....
Rubber rings.....	.....

4. Diet Kitchen:

Sink.....	Gas or electric plate.....
Ice chest.....	Dish sterilizer.....
Steam table.....	Trays and equipment of same:
Excellent.....	Good.....
Fair.....	Poor.....

5. Linen Closet:

Supply of linen.....	Arrangement.....	Cleanliness.....
----------------------	------------------	------------------

6. Broom or Maids' Closet: Hopper..... Condition of brooms and mops.....

10.)

MEDICAL EXAMINATION OF CHILDREN IN INSTITUTIONS

institution.....

address.....

name.....Age.....

Date of Admission.....

Date.....Height.....Weight.....

1. Vision: OD.....

OS.....

2. Hearing.....

3. Defective Teeth: Primary.....

Permanent.....

4. Defective Nasal Breathing.....

5. Hypertrophied Tonsils.....

6. Defective Nutrition.....

7. Cardiac Disease: Functional.....

Organic.....

8. Pulmonary.....

9. Orthopedic Defect.....

10. Nervous Disease.....

11. Miscellaneous.....

11.)

INDUSTRIAL DIVISION

Women and Industry Questionnaire

Firm.....Address.....

Product.....

1. Number Employees (on production)—

Male.....

Female.....

Boys 15 to 16.....

Girls 16 to 18.....

2. Regularity of employment.....

3. Transportation.....

4. Hours:to.....Lunch.....to.....Saturday.....to.....

- Maximum daily..... Total weekly..... Overtime.....
5. Night work.....
6. Women first employed.....
7. Operations found unsuitable for women and why.....
8. List of operations now performed by women. Check those on which women replace men.

Operation	No. Employees	Wage rate	Piece or Time Work	Wkly. earnings

9. Comparison with men or boys on same work as to wage and efficiency.....
10. Minimum or guaranteed wage.....
11. Work, how learned—Training school, forelady, other workers.....
12. Opportunities for advancement.....
13. Types of women workers—nationality, color, age, civil state.....
- Educational requirement.....

	Male	Female
14. Absences.....		
Lates.....		
15. Length of service.....		
Transfers.....		
16. Accident incidence.....		
Sickness incidence.....		
17. Medical service.....		
Hospital used.....		
Home visits.....		
18. Supervision of women by.....		Extent.....
Employment woman.....		
Doctor (M. F. full, part time).....		Hours.....
Nurse.....		
Service worker.....		
Forelady.....		
19. Working conditions.....		
(a) Type of building.....		
(b) Ventilation.....		
(c) Cleanliness.....		
(d) Sanitation.....		
(e) Light.....		
(f) Distribution of women.....		Crowding.....
(g) Standing.....		Chairs.....

(h) Lifting.....

(i) Fatiguing movements.....

(j) Special health hazards.....

(k) Lockers, dressing room.....

(l) Uniforms, optional, required, provided.....laundered.....type.....

(m) Couches.....

(n) Lunch room.....Food sold, heated.....

(Rest Periods).....

20. Physical examination, partial, complete, applicants, employes, periodic, transfers.....

Care of pregnant.....V. D.....

21. Health education.....vs. special hazards.....

Safety instruction.....

22. Vacations.....

23. Recreation.....

24. Benefit association.....

25. Shop committee. Union.....

Information from.....By.....Date.....

Comment:.....

(12.)

PUBLIC HEALTH EDUCATION

Name of Organization.....

Type of education given—Anti-tuberculosis

Social Hygiene.....

Etc.....

Way information given—

Literature.....

Lectures.....

Etc.....

How many people reached?.....

What age and sex reached?.....

Any racial adaptation?.....

Consistent or spasmodic effort?.....

Conception of future activity along this line?.....

Samples of literature.....

(13.)

MILK CONSUMPTION SURVEY

Date of visit.....

Nationality (7).....No.....Street.....Agency visiting (1).....

Family receiving relief (2) yes.....no.....Kind of relief (3).....

No. in family: (4) Adults (15 and over).....Lodgers.....

Children (6-14 incl.).....Children under 6.....

Illness in family at time of visit (8).....

Members (6)	Nature of Illness
.....
.....
.....
Milk: Daily amount (qts.).....Bottle.....Bulk.....Canned (5).....Otherwise.....	
Check	
Kept cold.....Covered.....	
Is it pasteurized: by dealer.....or at home.....is it certified?.....	
Check	
Remarks:.....	
.....	
.....	
Investigator.....	

- 1. Initials only.
- 2. Other than home nursing care.
- 3. Financial, clothing, food, medical care, etc.
- 4. Include any relative living in family as adults or children as case may be.
- 5. Condensed—evaporated, etc.
- 6. Mother, lodger, etc., call all persons 14 and under, children.
- 7. Be particular to specify negroes.
- 8. Include—(a) Sickness requiring the attention of physician, (b) Sickness requiring treatment at hospital or dispensary, (c) Sickness preventing work, (d) Sickness preventing attendance at school.

CENSUS OF HOSPITAL PATIENTS

[illegible]

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By JULIA T. EMERSON

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